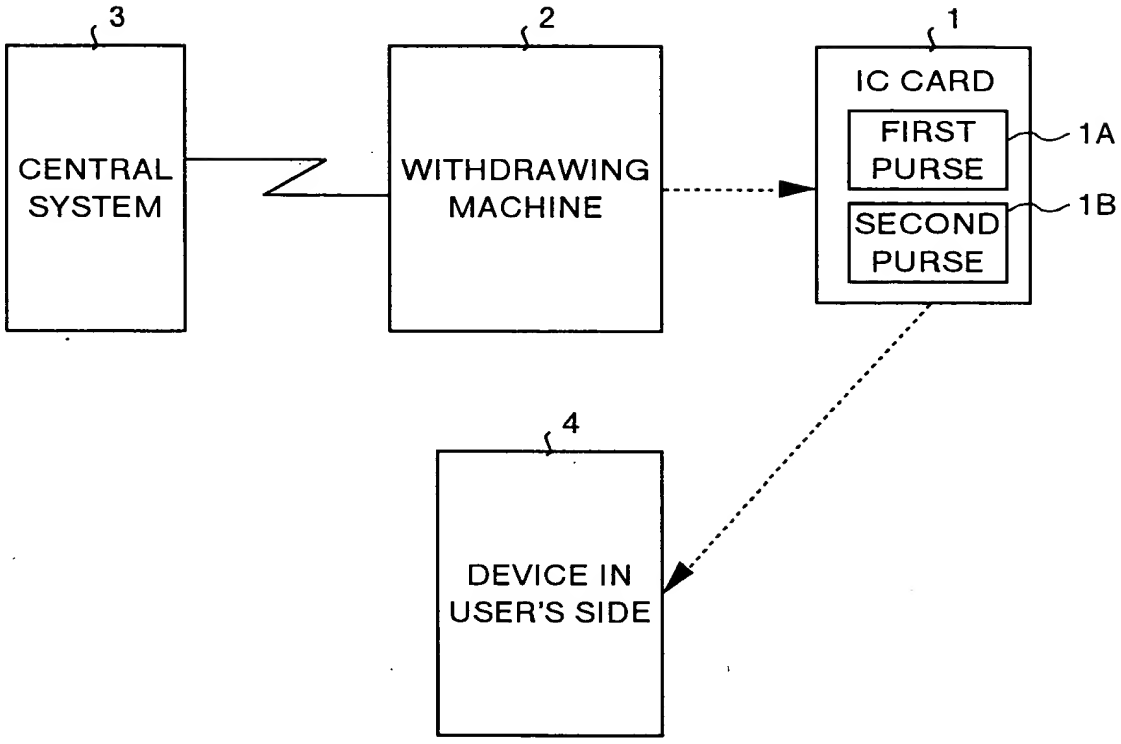
O.G. FIG.
CLASS SUBCLASS
DRAFTSMAN

FIG.1



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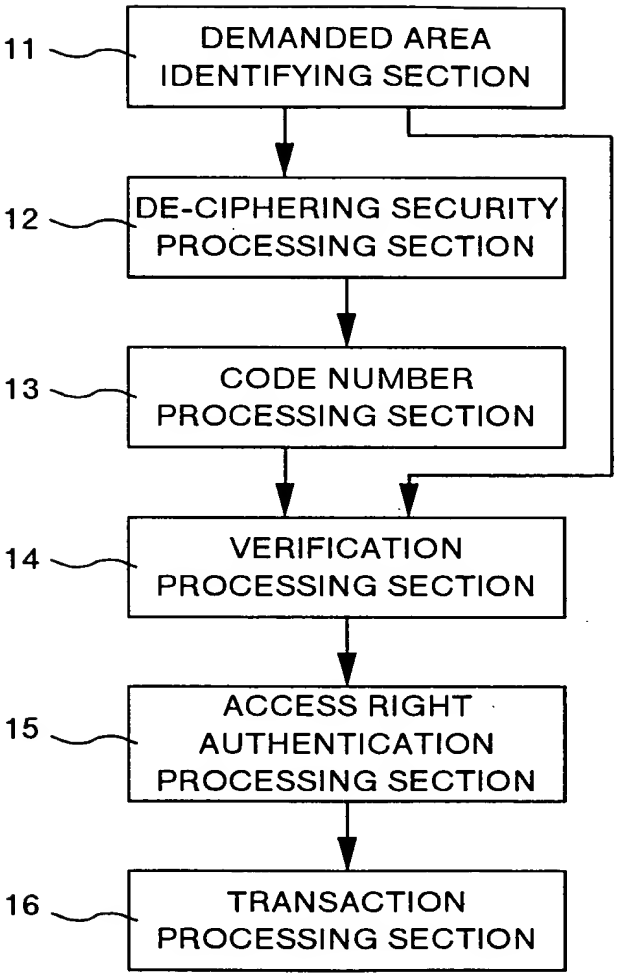
O.G. FIG.
CLASS | SUBCLASS
DRAFTSMAN

FIG.2



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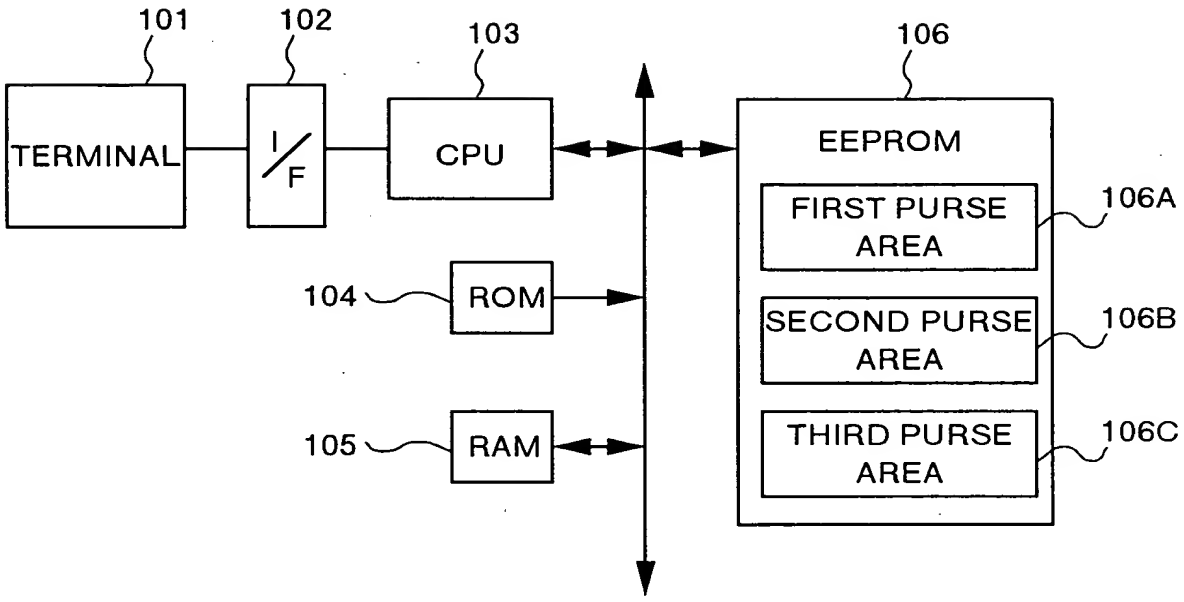
O.G. FIG.
CLASS | SUBCLASS
DRAFTSMAN

FIG.3



CLASS SUBCLASS
DRAFTSMAN

FIG.4A

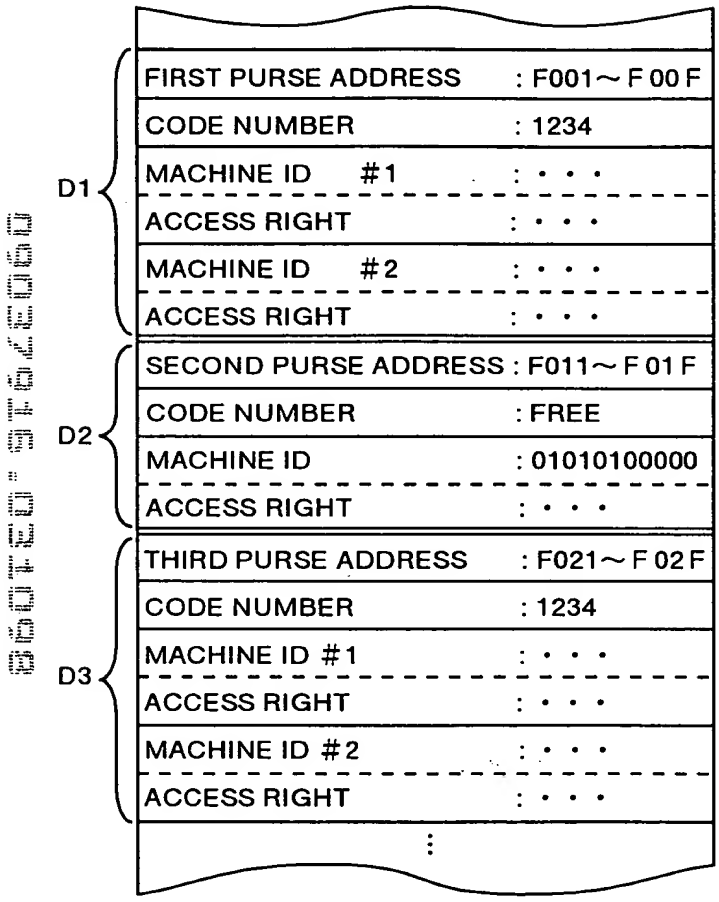
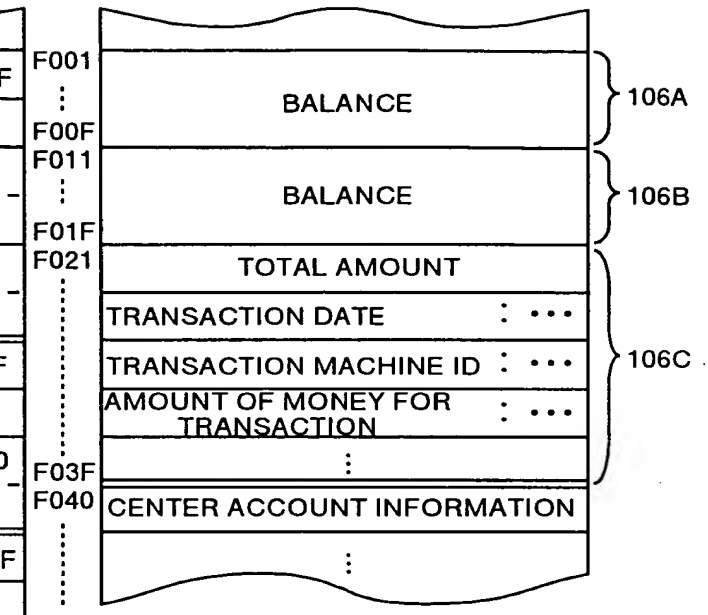


FIG.4B



O.G. FIG.
CLASS SUBCLASS
DRAFTSMAN

FIG.5

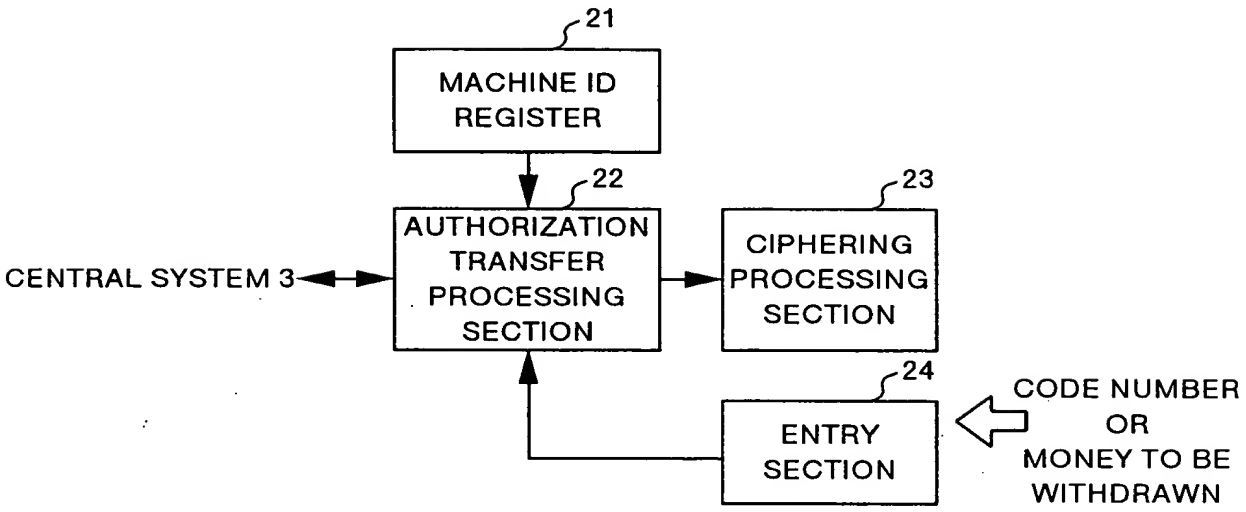
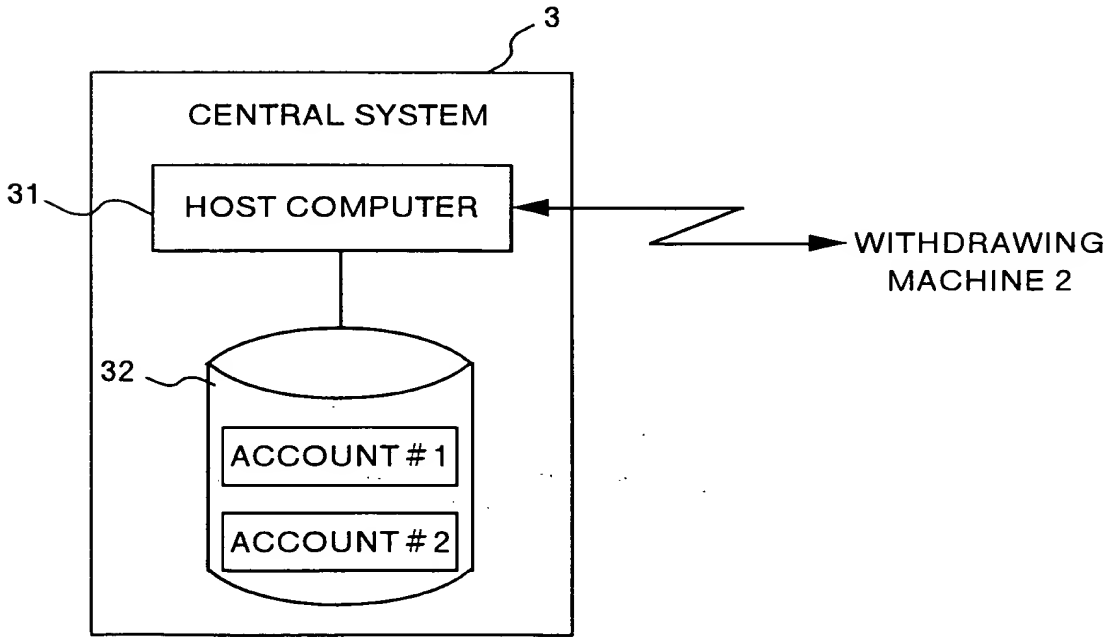
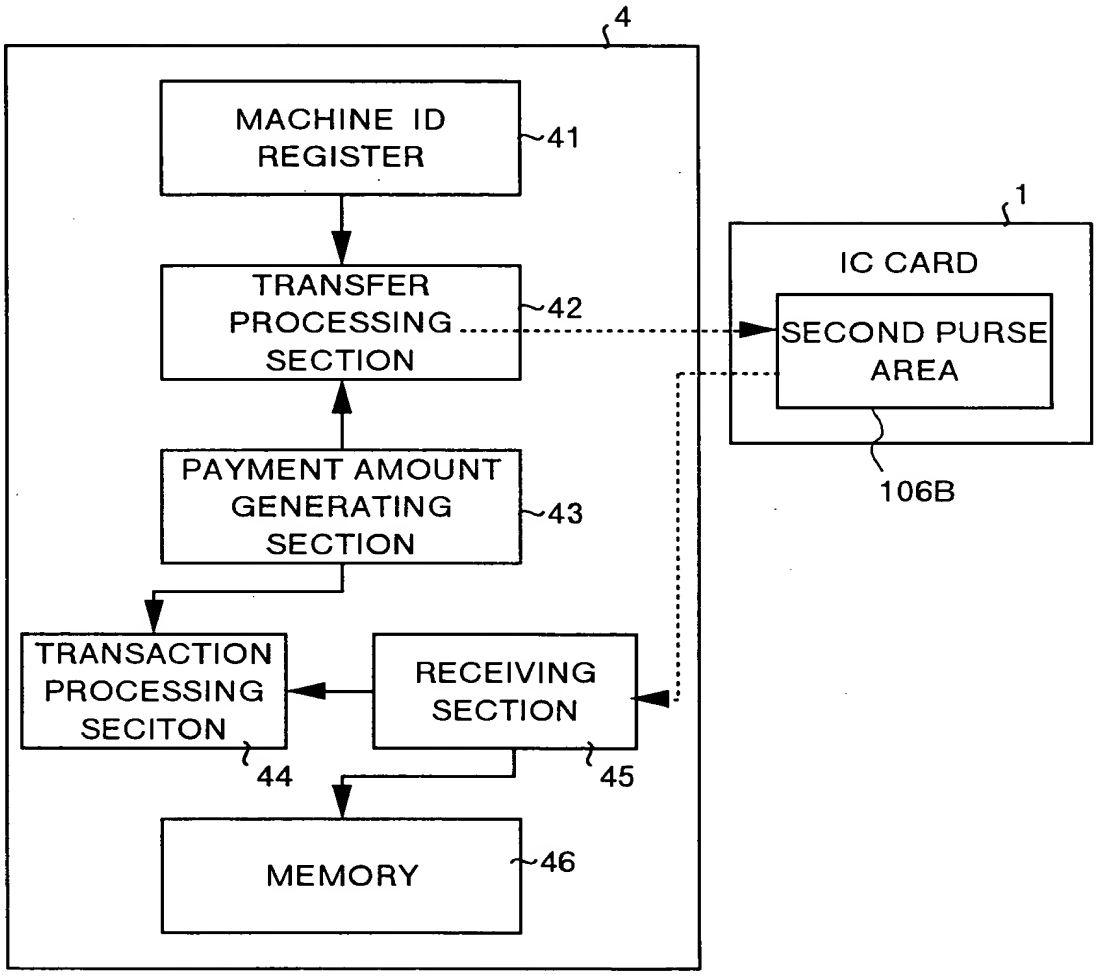


FIG.6



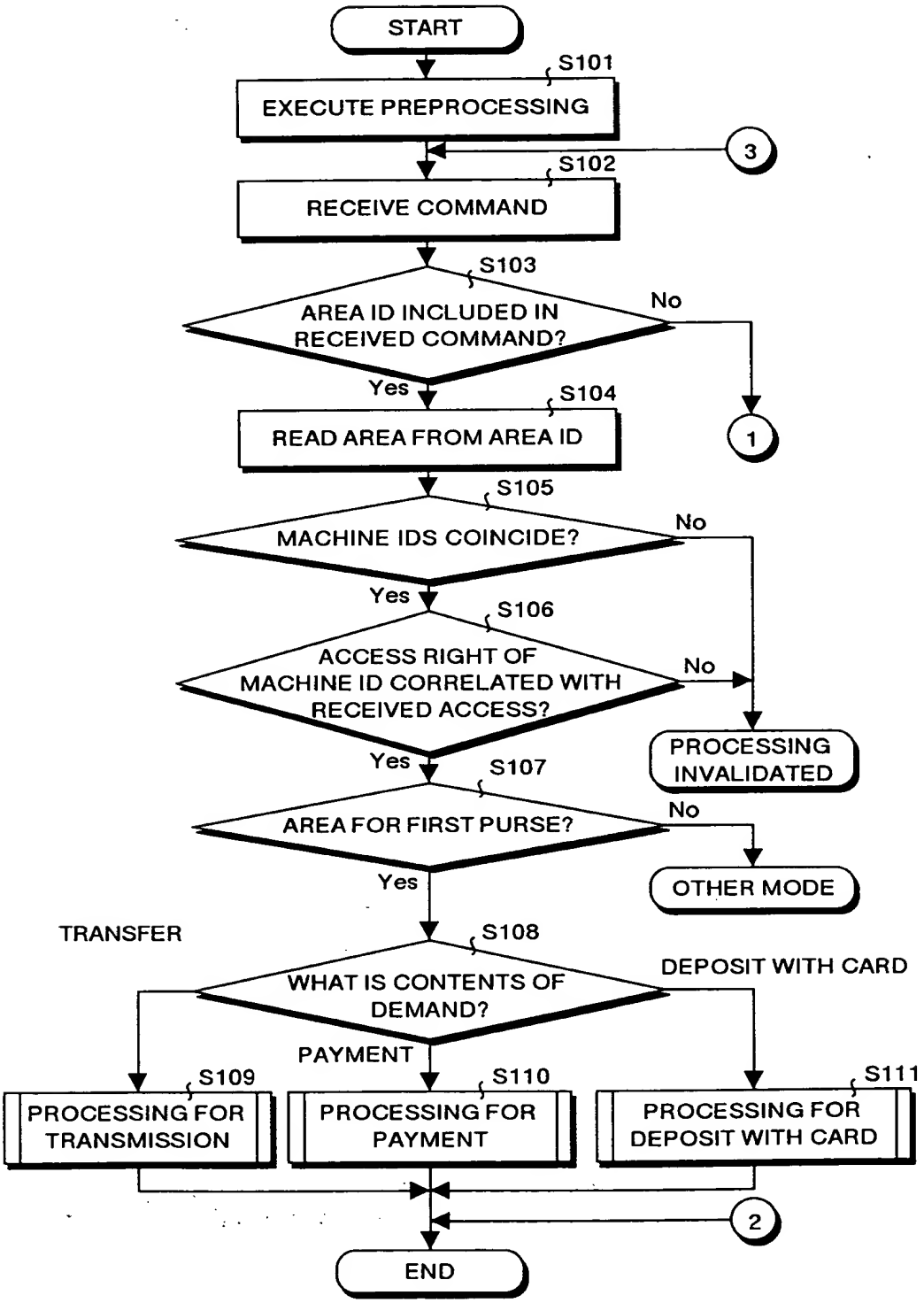
O.G. FIG.
BY
DRAFTSMAN
CLASS
SUBCLASS

FIG.7



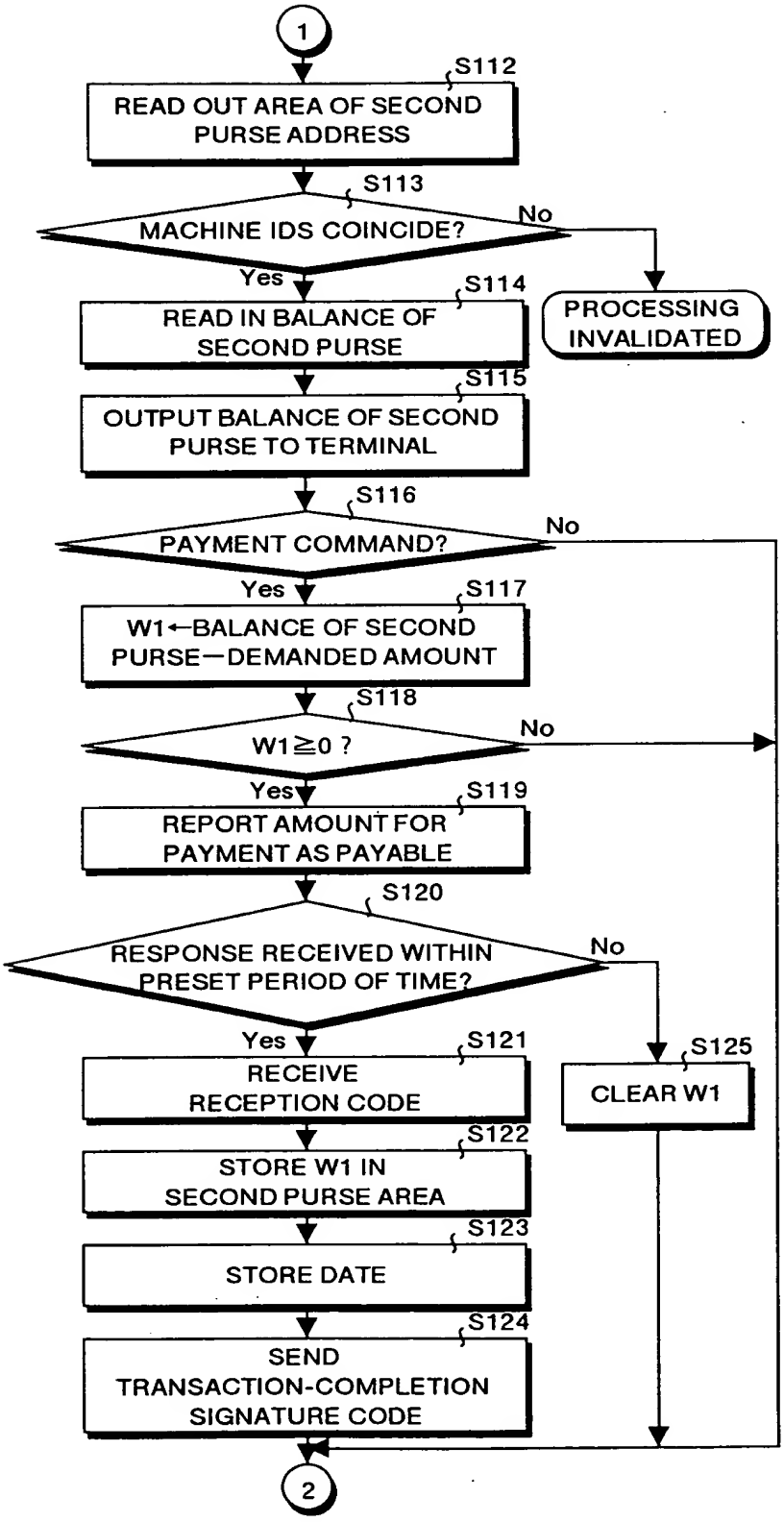
O.G. FIG.
CLASS
SUBCLASS
DRAFTSMAN

FIG.8



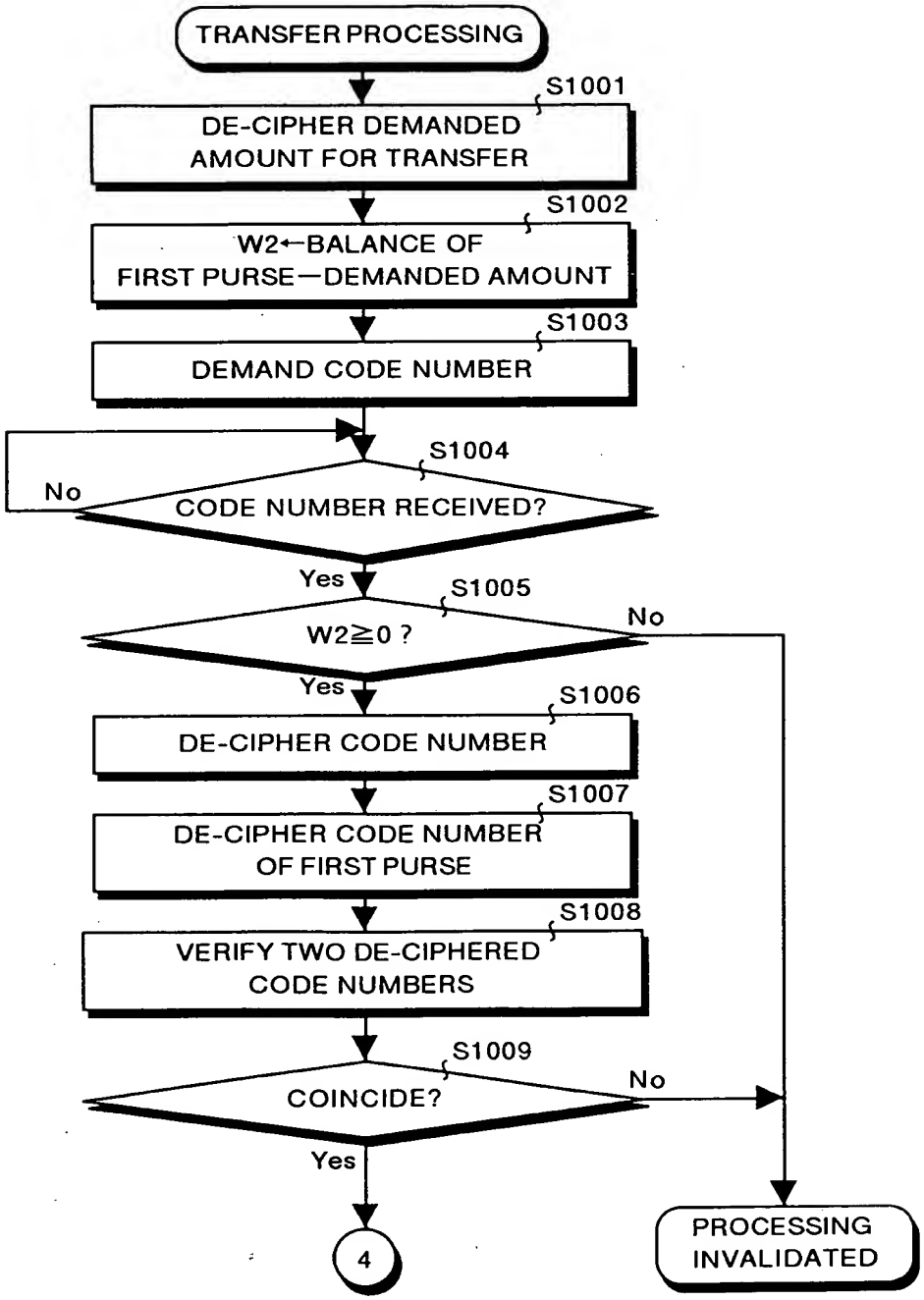
O.G. FIG.
CLASS | SUBCLASS
DRAFTSMAN

FIG.9



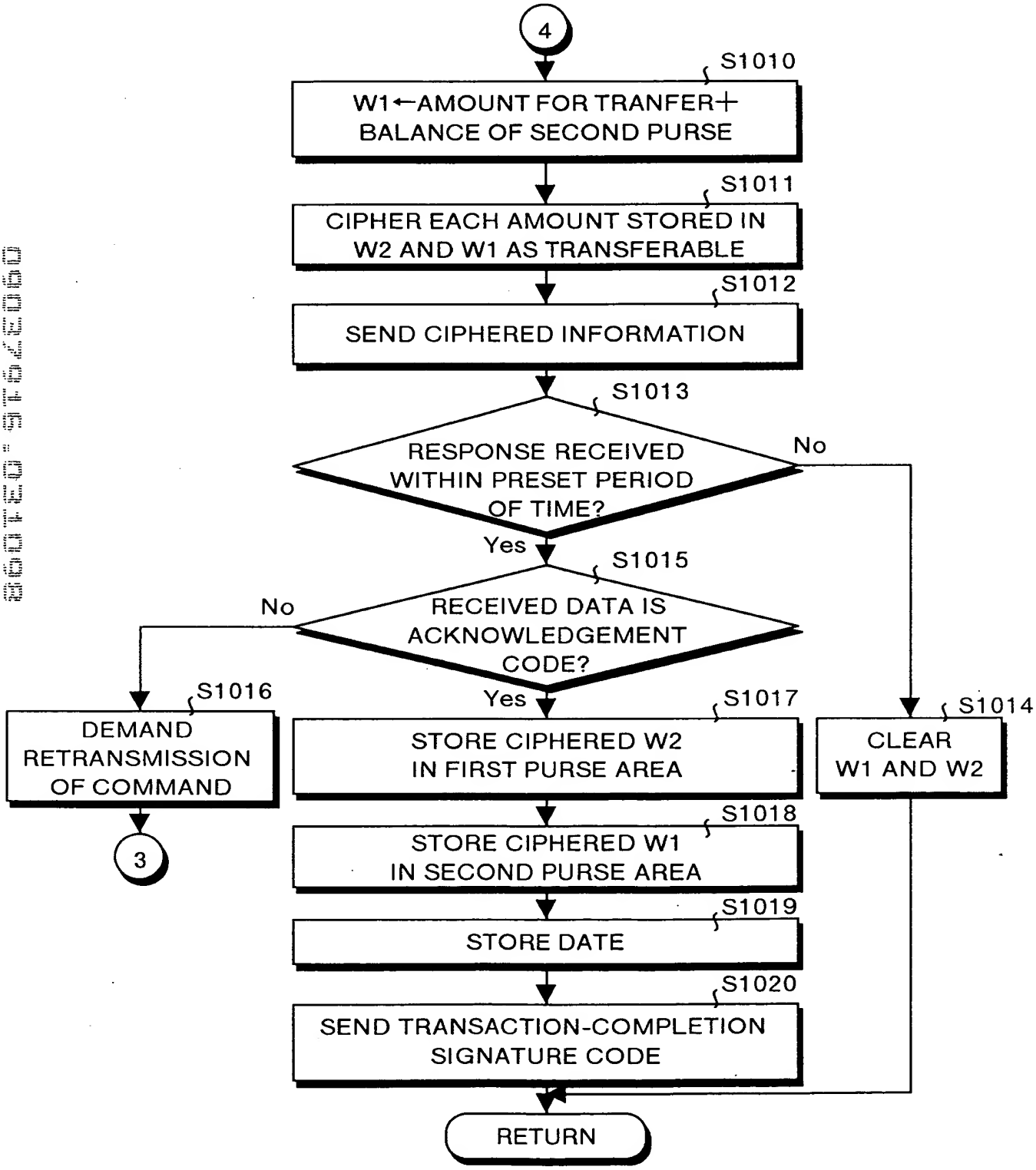
O.G. FIG.
DRAFTSMAN

FIG.10



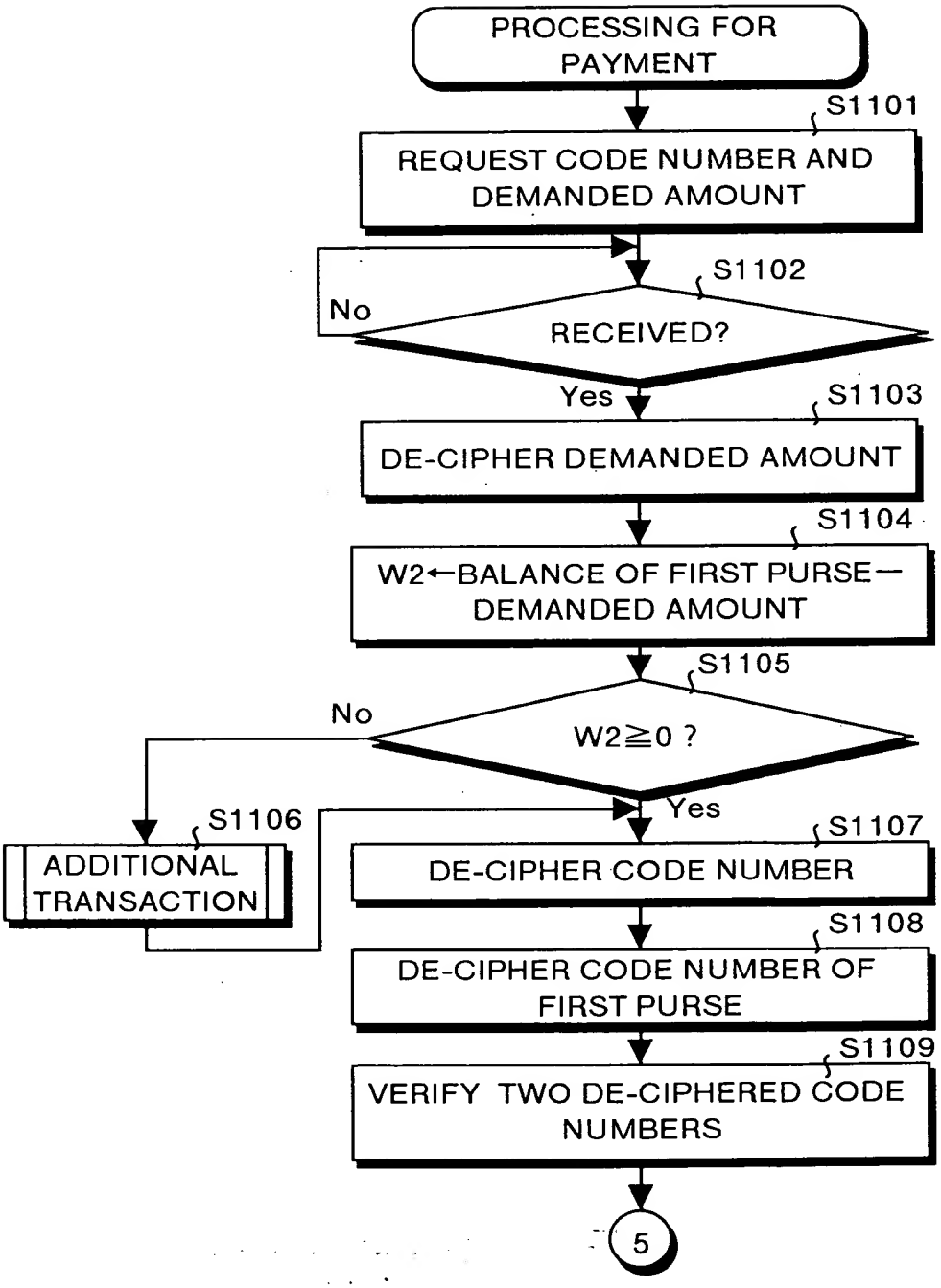
O.G. FIG.
CLASS | SUBCLASS
DRAFTSMAN

FIG.11



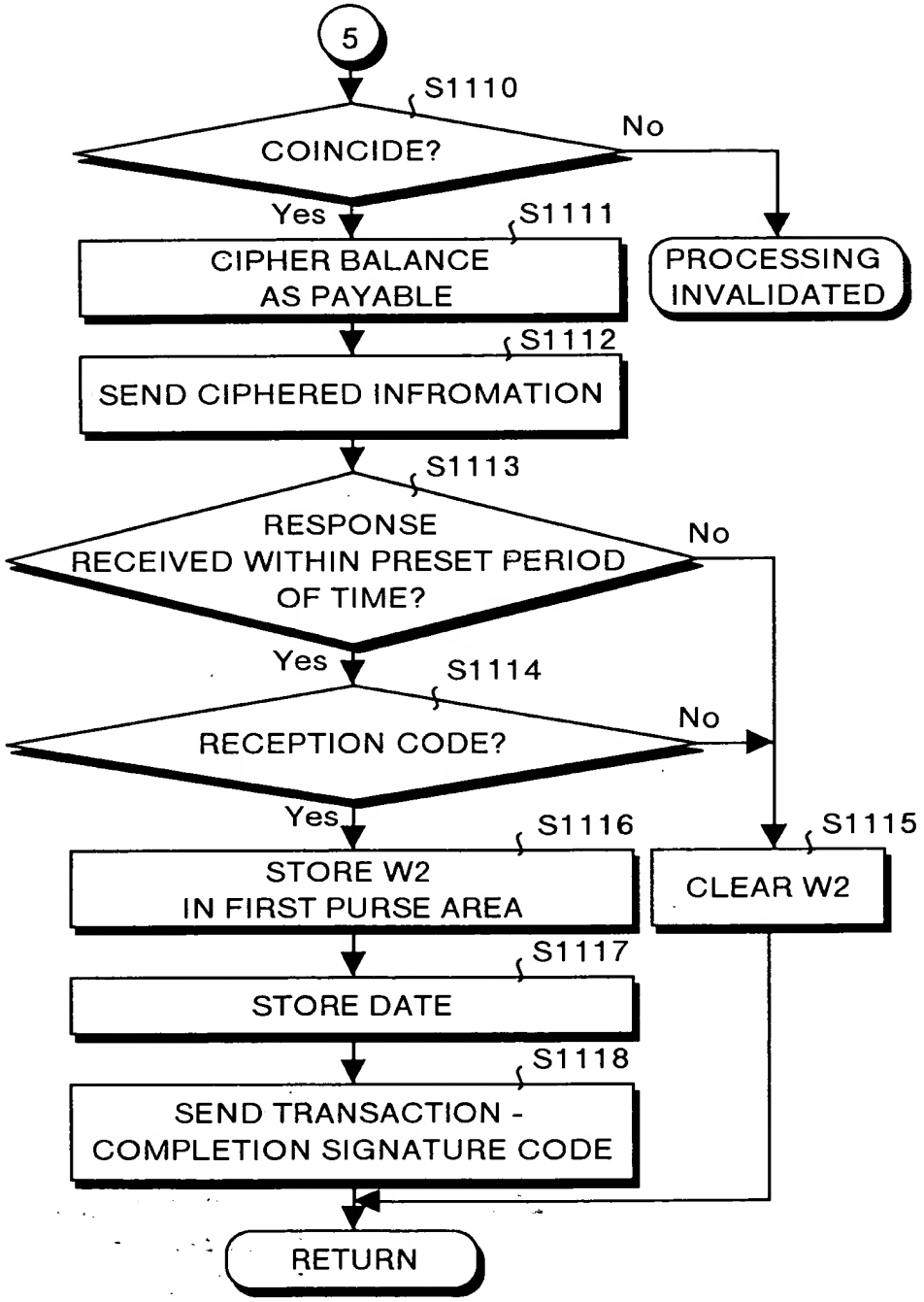
O.G. FIG.
CLASS SUBCLASS
DRAFTSMAN

FIG.12



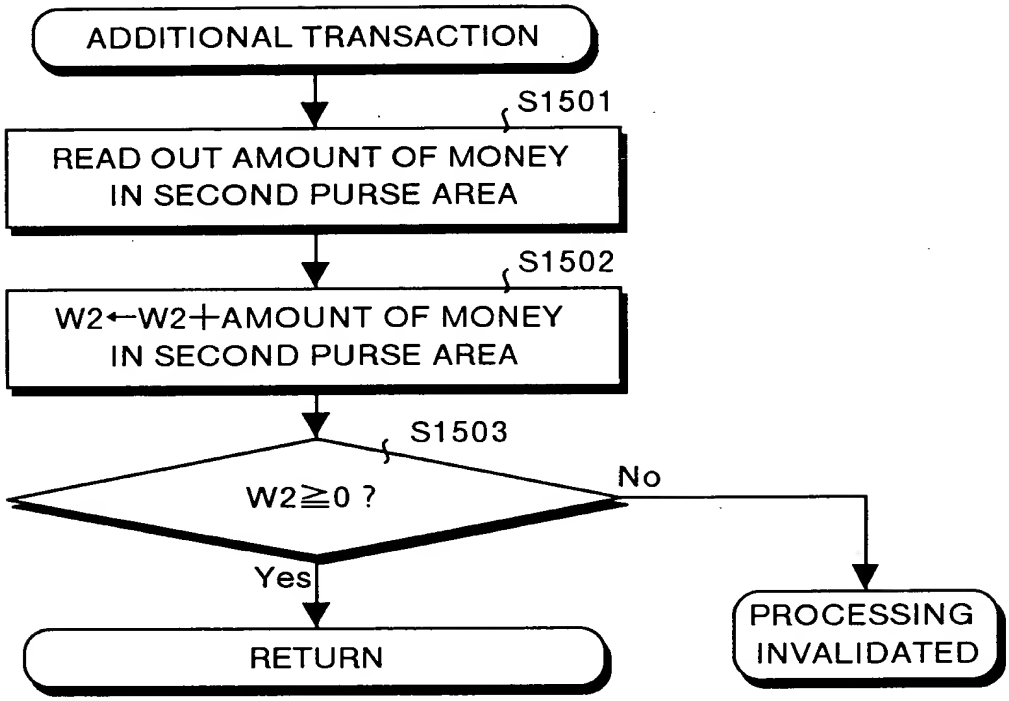
DRAWING
FIG.
CLASS SUBCLASS
DRAFTSMAN

FIG.13



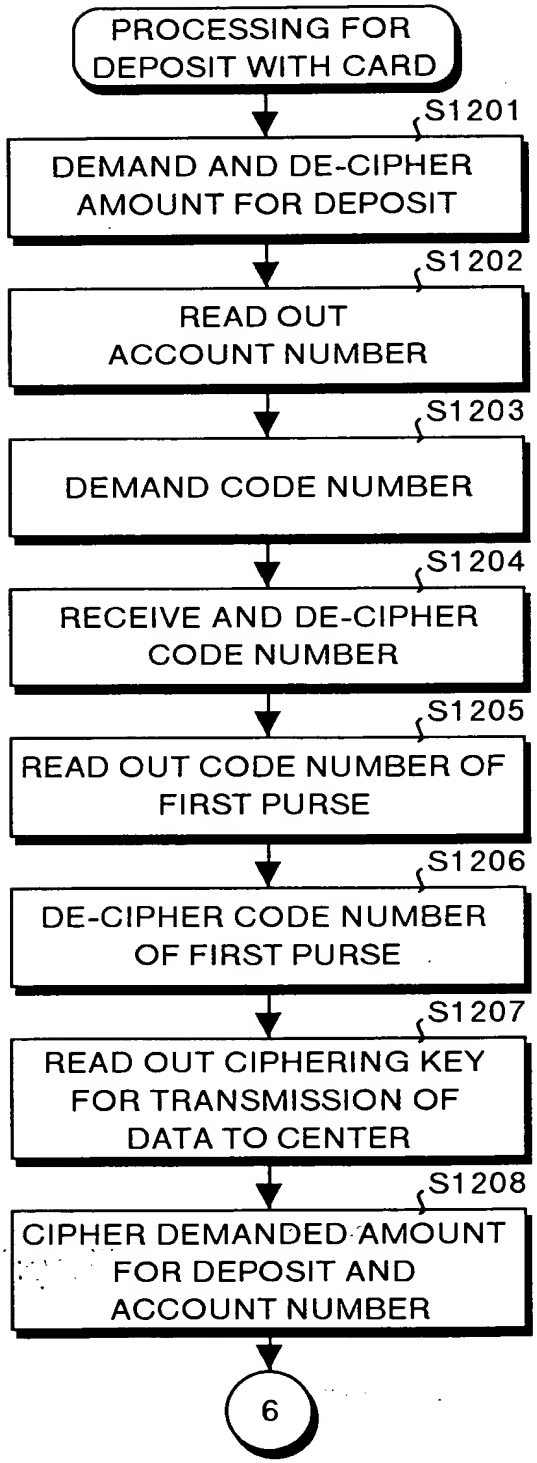
DRAFTSMAN

FIG.14



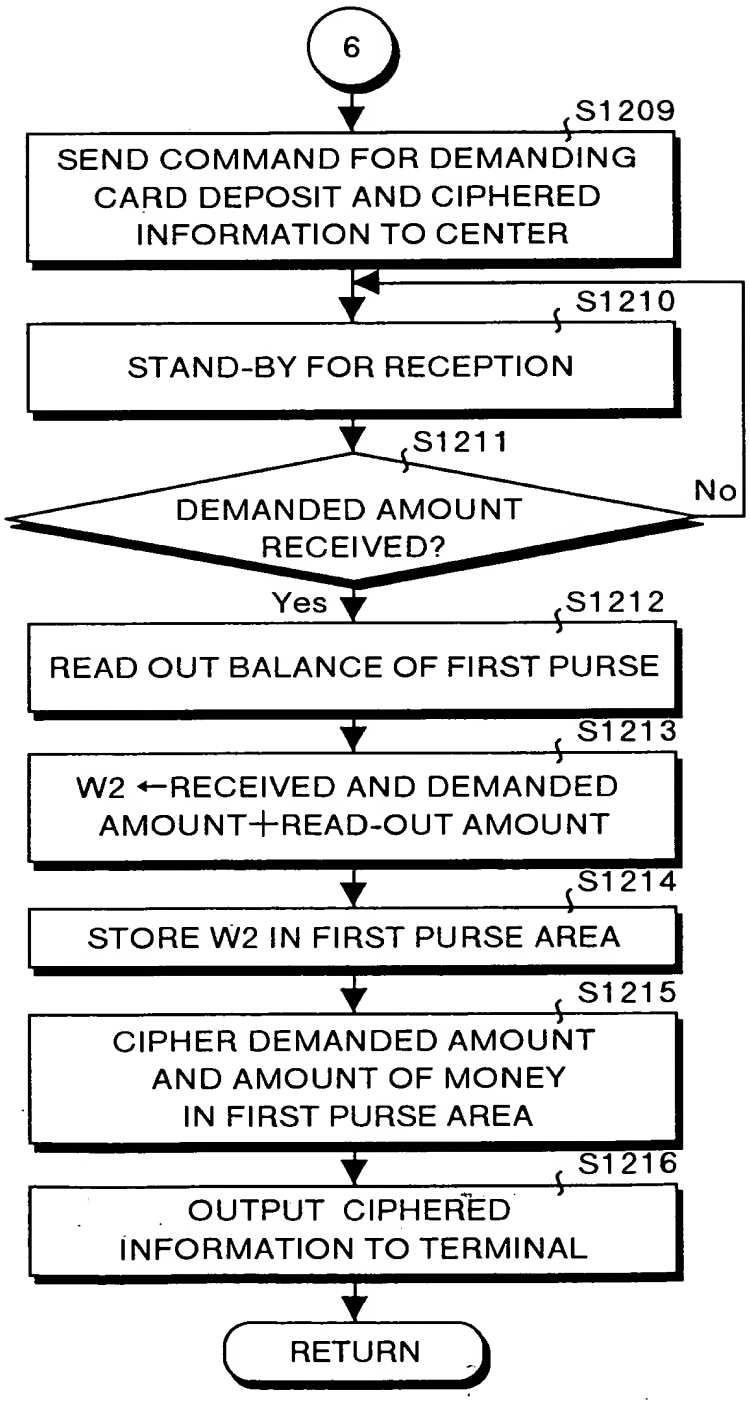
O.G. FIG.
CLASS | SUBCLASS
DRAFTSMAN

FIG.15



G.C. ART
CLASS SUBCLASS
EXAMINER

FIG.16



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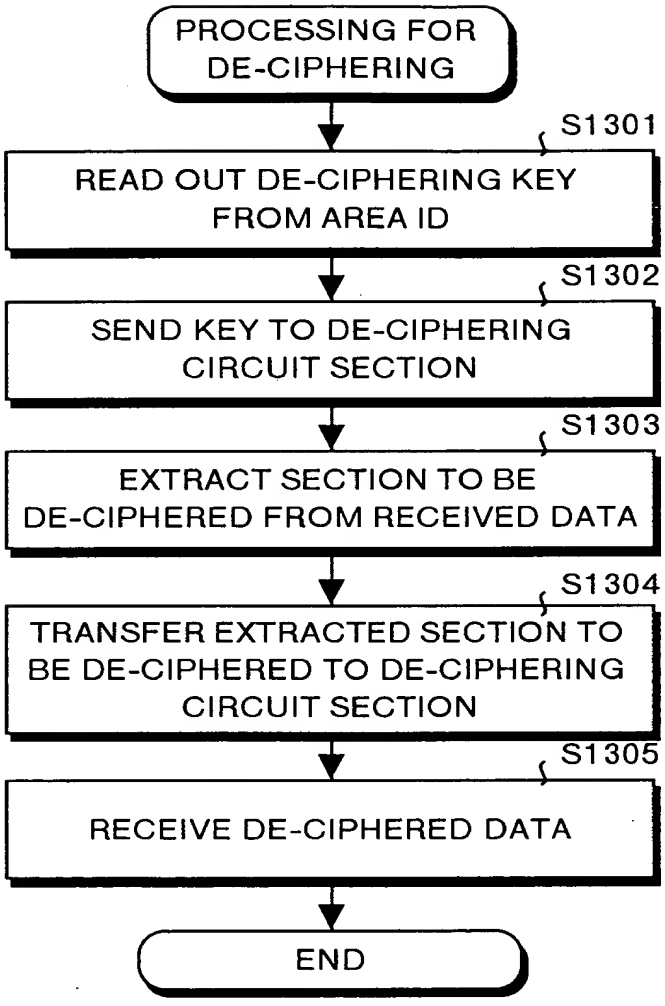
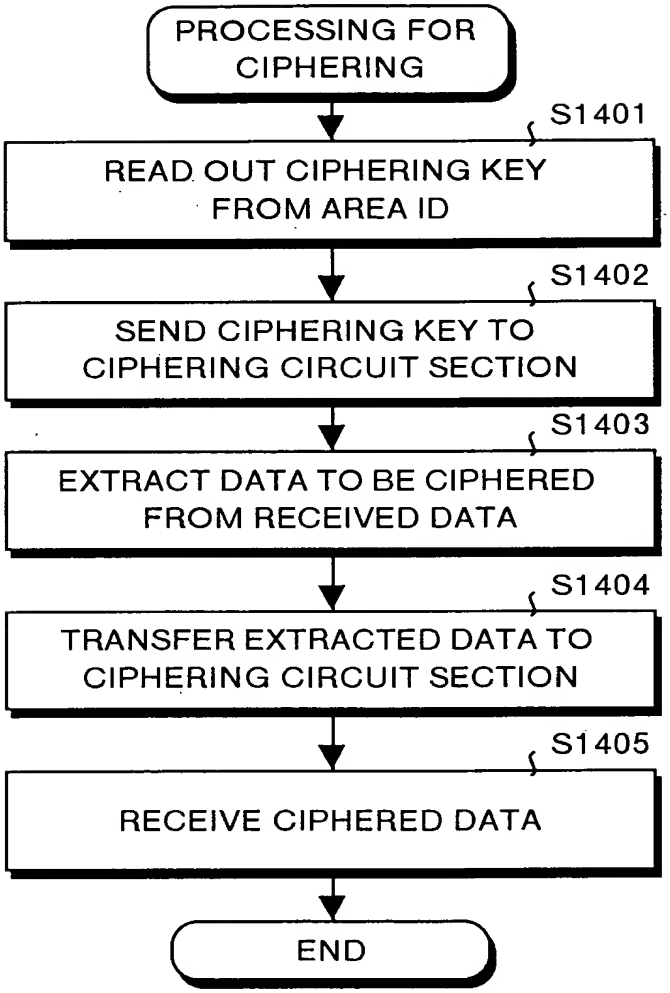
A.U. FIL.
CLASS | SUBCLASS
CRAFTSMAN

FIG.17



O.G. FIG.
CLASS | SUBCLASS
DRAFTSMAN

FIG.18



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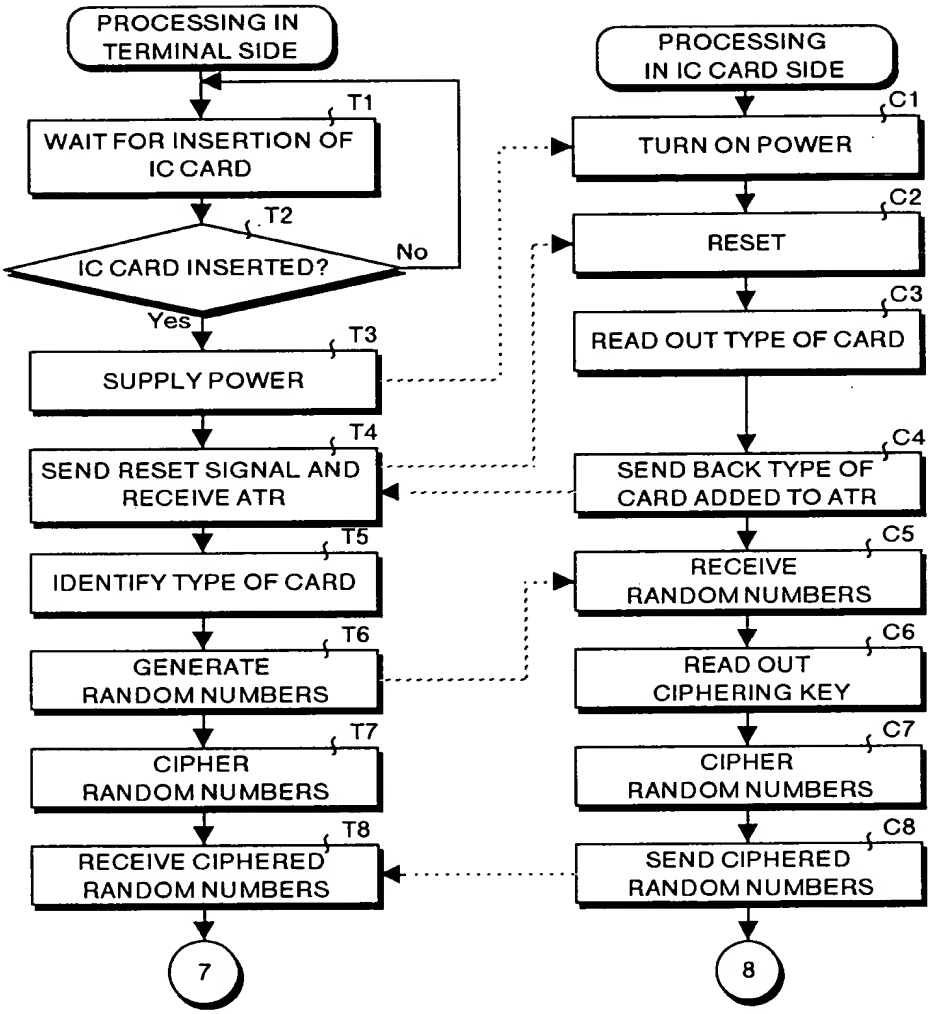
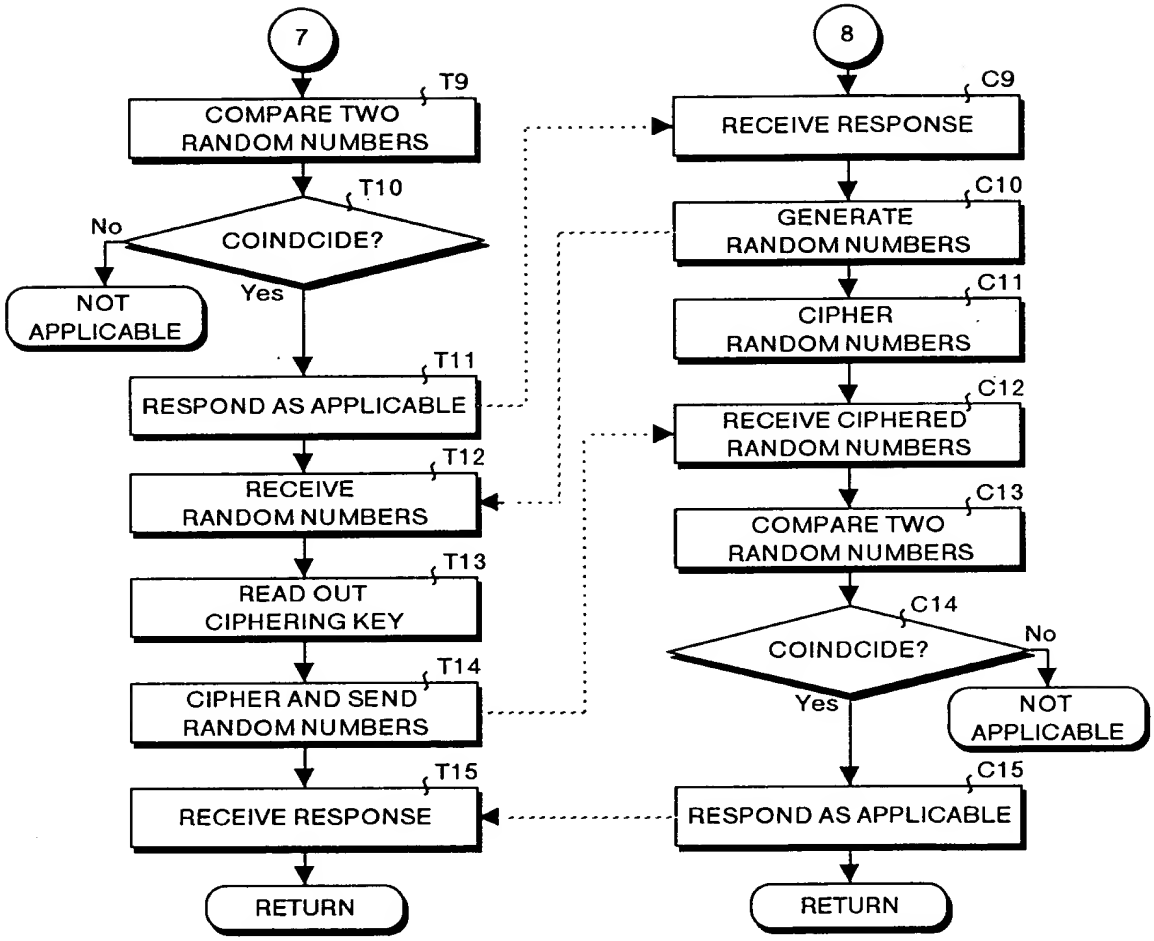
O.G. FIG.
BY | CLASS | SUBCLASS
DRAFTSMAN

FIG.19



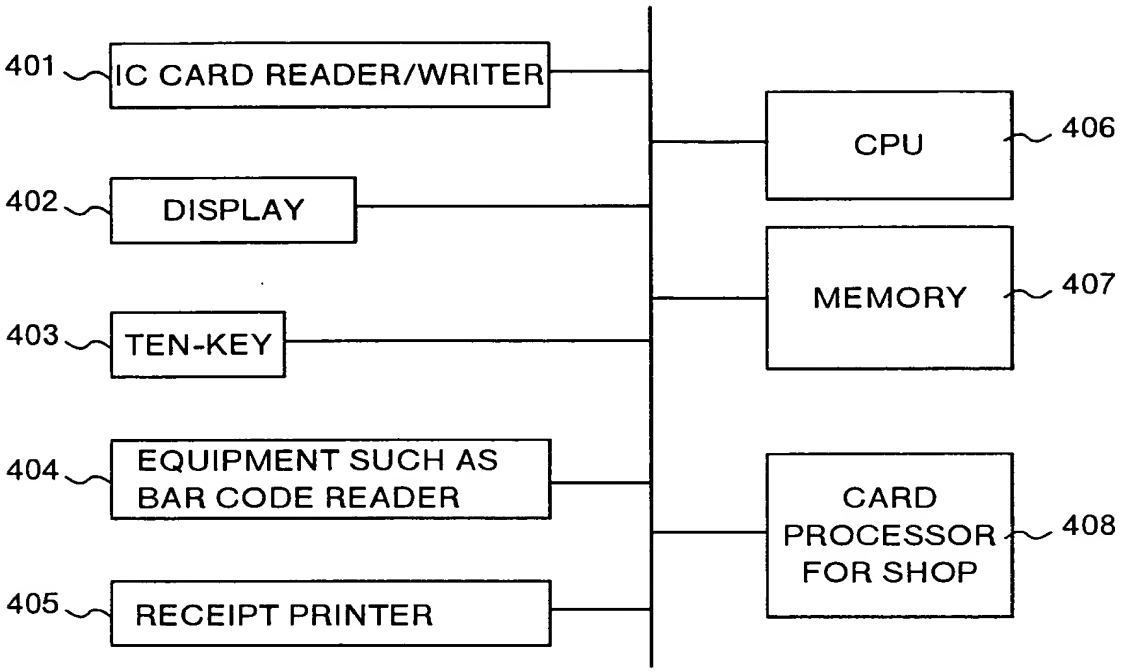
O.G. FIG.
CLASS | SUBCLASS
DRAFTSMAN

FIG.20



O.G. FIG.
CLASS | SUBCLASS
DRAFTSMAN

FIG.21



09650460 "09650460"

O.G. FIG.
BY
CLASS | SUBCLASS
DRAFTSMAN

FIG.22

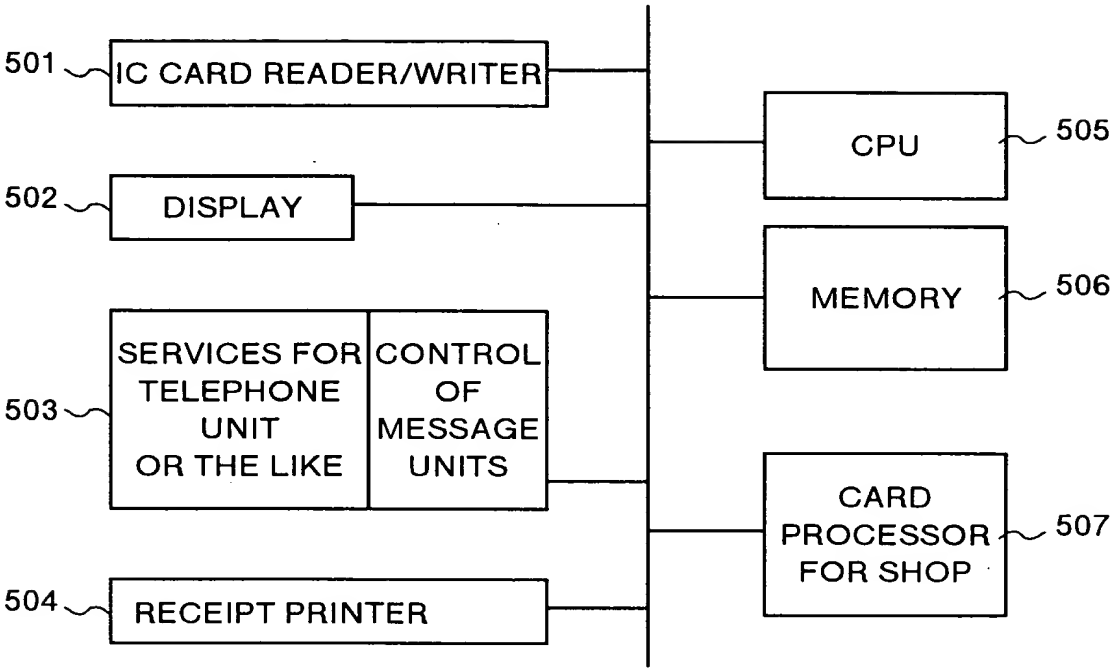


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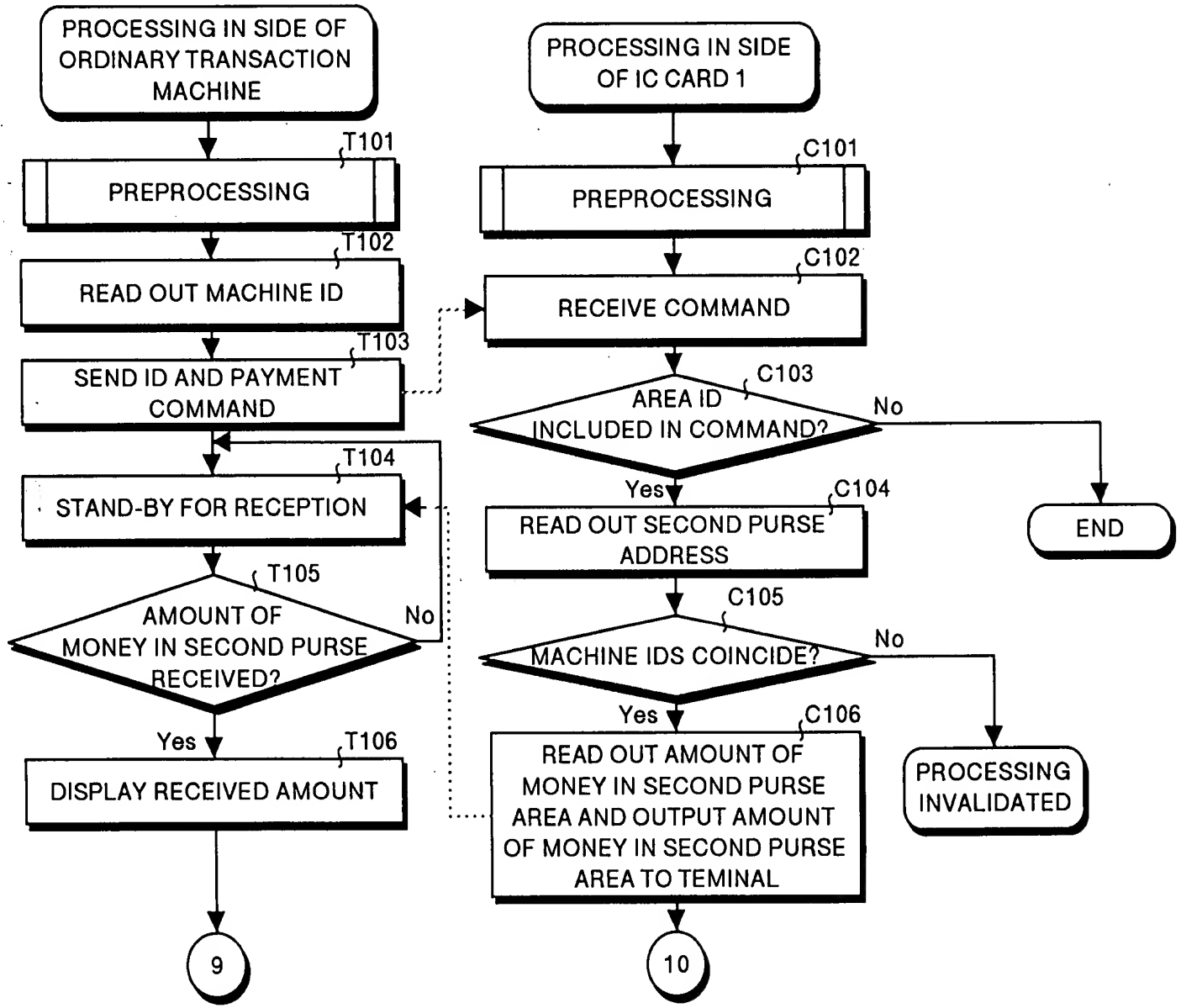
FIG.23



PATENT OFFICE
CLASS
SUBCLASS
DRAFTSMAN

CLASS
DRAFTSMAN

FIG.24

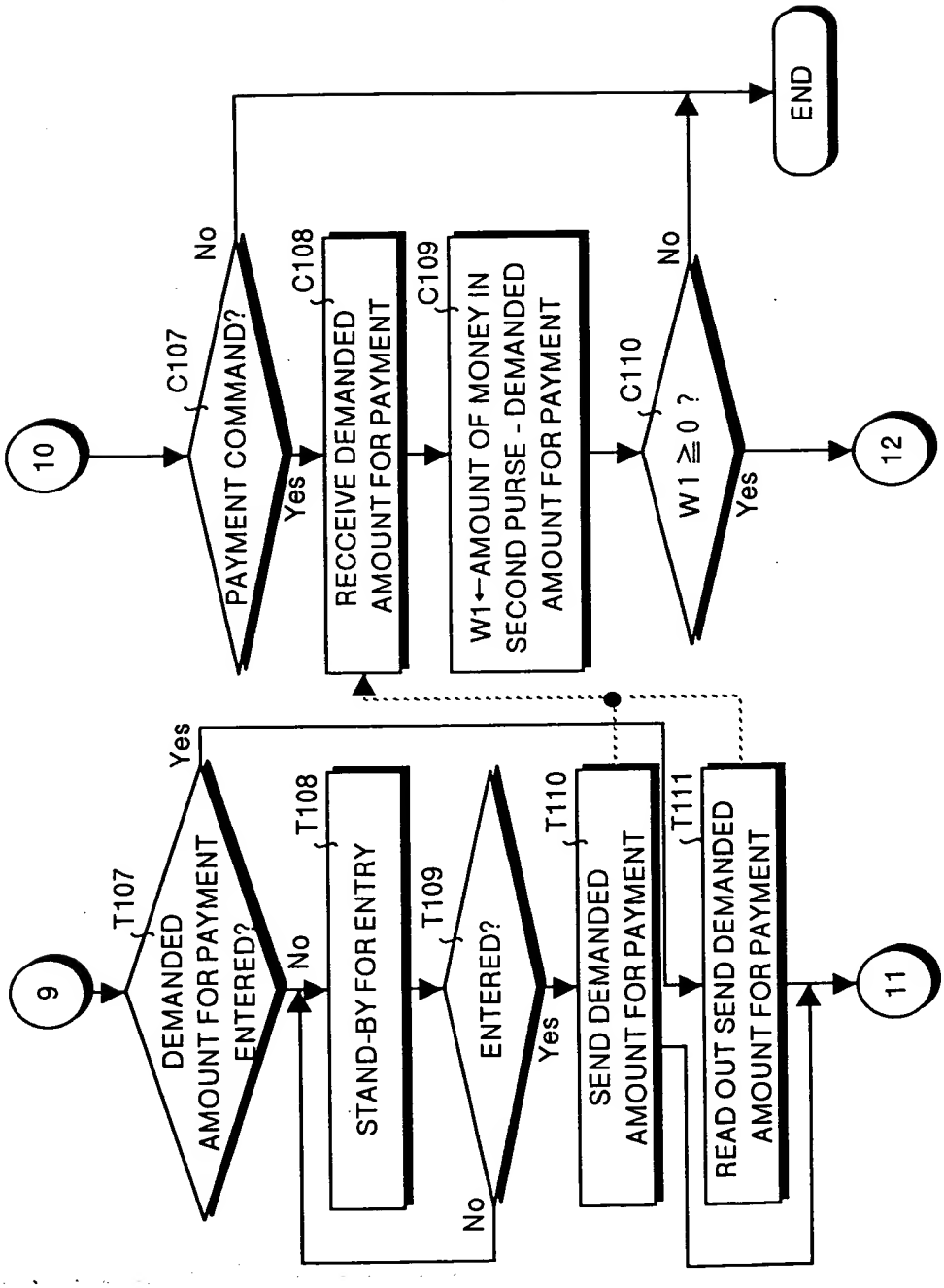


FIG.25

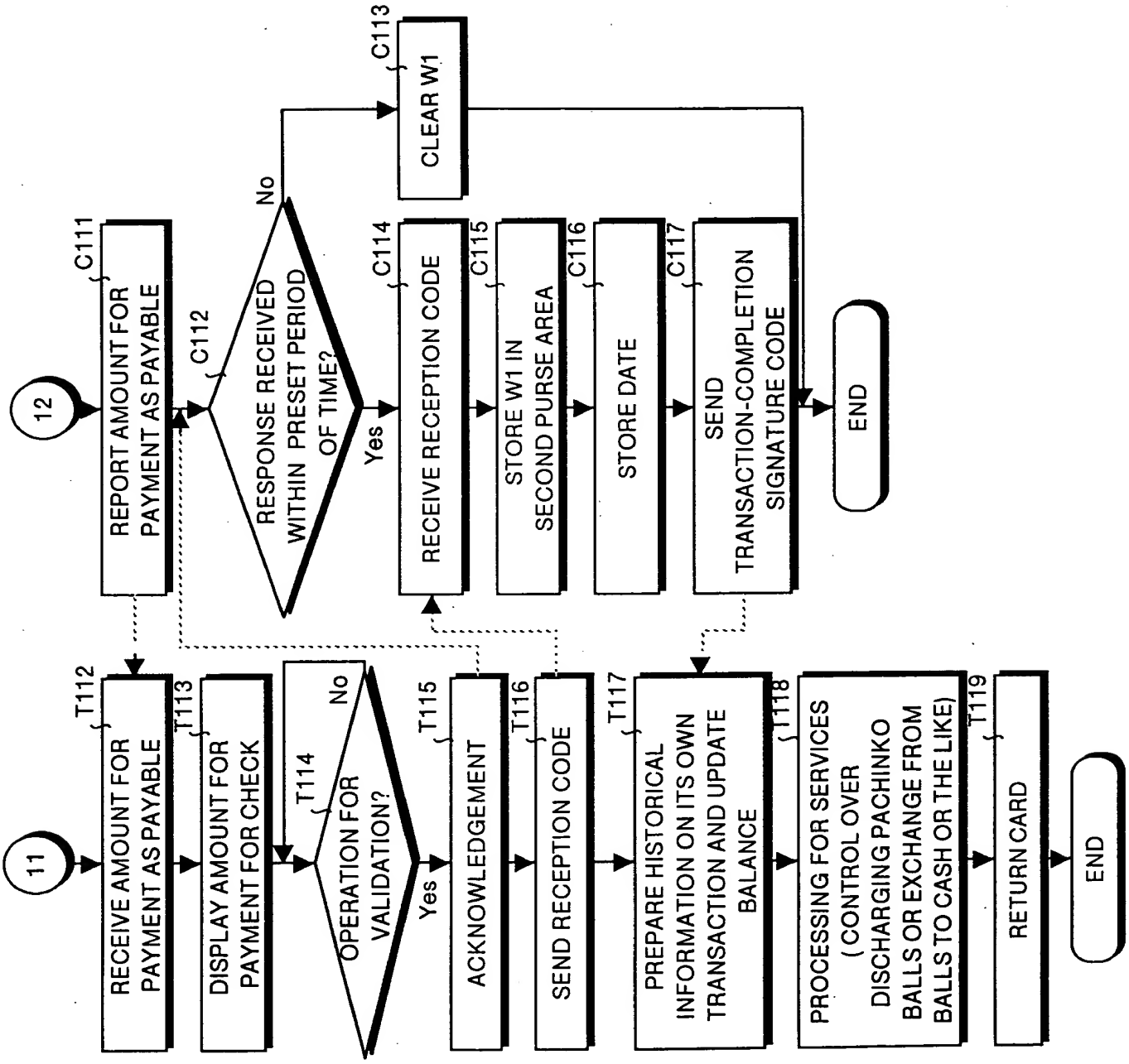

11
T112
RECEIVE AMOUNT FOR PAYMENT AS PAYABLE
T113
DISPLAY AMOUNT FOR PAYMENT FOR CHECK
T114
OPERATION FOR VALIDATION?
No
Yes
T115
ACKNOWLEDGEMENT
T116
SEND RECEPTION CODE
T117
PREPARE HISTORICAL INFORMATION ON ITS OWN TRANSACTION AND UPDATE BALANCE
T118
PROCESSING FOR SERVICES (CONTROL OVER DISCHARGING PACHINKO BALLS OR EXCHANGE FROM BALLS TO CASH OR THE LIKE)
T119
RETURN CARD
END
12
C111
REPORT AMOUNT FOR PAYMENT AS PAYABLE
C112
RESPONSE RECEIVED WITHIN PRESET PERIOD OF TIME?
No
Yes
C113
CLEAR W1
C114
RECEIVE RECEPTION CODE
C115
STORE W1 IN SECOND PURSE AREA
C116
STORE DATE
C117
SEND TRANSACTION-COMPLETION SIGNATURE CODE
END

FIG.26

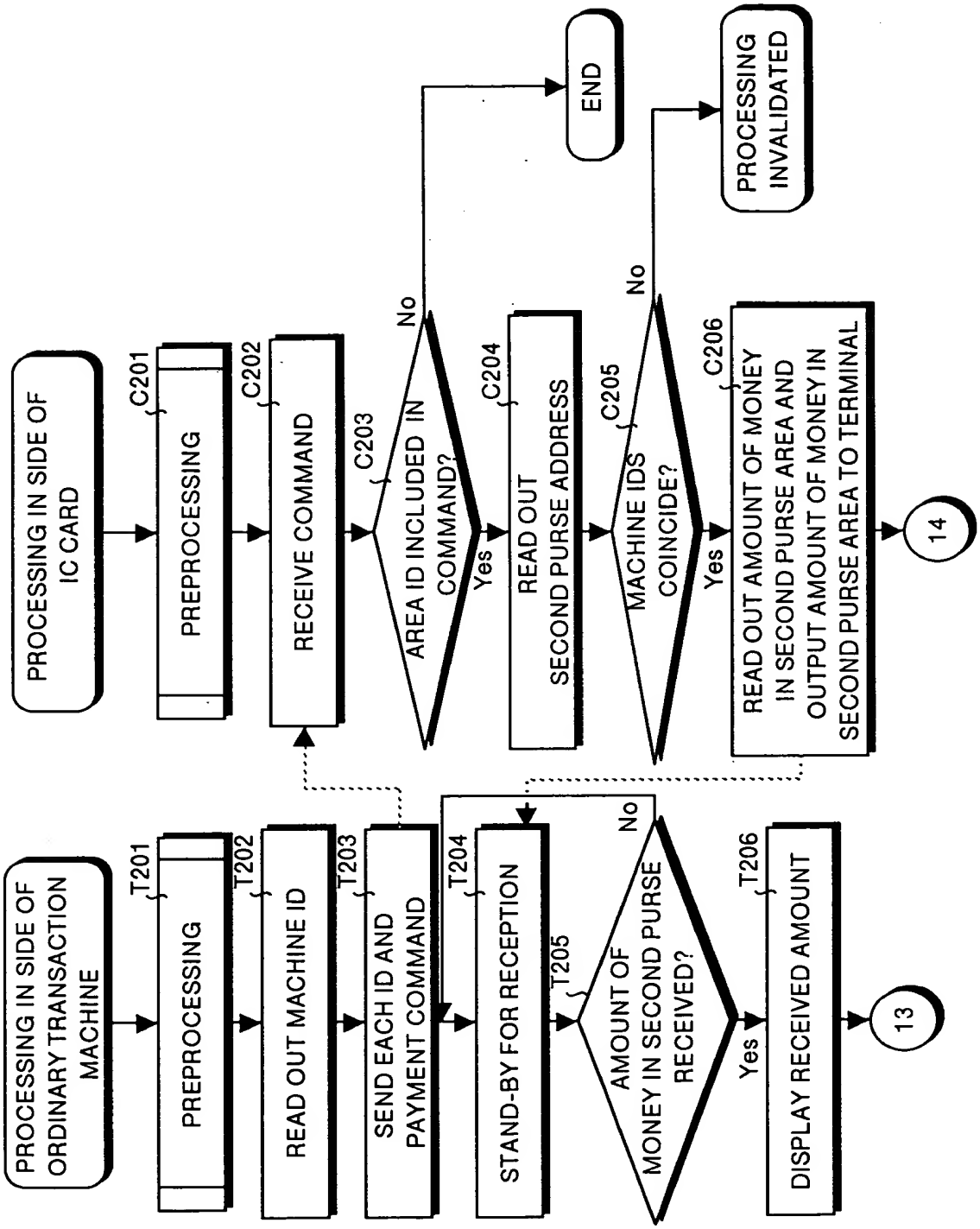

PROCESSING IN SIDE OF ORDINARY TRANSACTION MACHINE
T201
PREPROCESSING
T202
READ OUT MACHINE ID
T203
SEND EACH ID AND PAYMENT COMMAND
T204
STAND-BY FOR RECEPTION
T205
AMOUNT OF MONEY IN SECOND PURSE RECEIVED?
No
Yes
T206
DISPLAY RECEIVED AMOUNT
13
PROCESSING IN SIDE OF IC CARD
C201
PREPROCESSING
C202
RECEIVE COMMAND
C203
AREA ID INCLUDED IN COMMAND?
No
Yes
END
C204
READ OUT SECOND PURSE ADDRESS
C205
MACHINE IDS COINCIDE?
No
Yes
PROCESSING INVALIDATED
C206
READ OUT AMOUNT OF MONEY IN SECOND PURSE AREA AND OUTPUT AMOUNT OF MONEY IN SECOND PURSE AREA TO TERMINAL
14

FIG.27

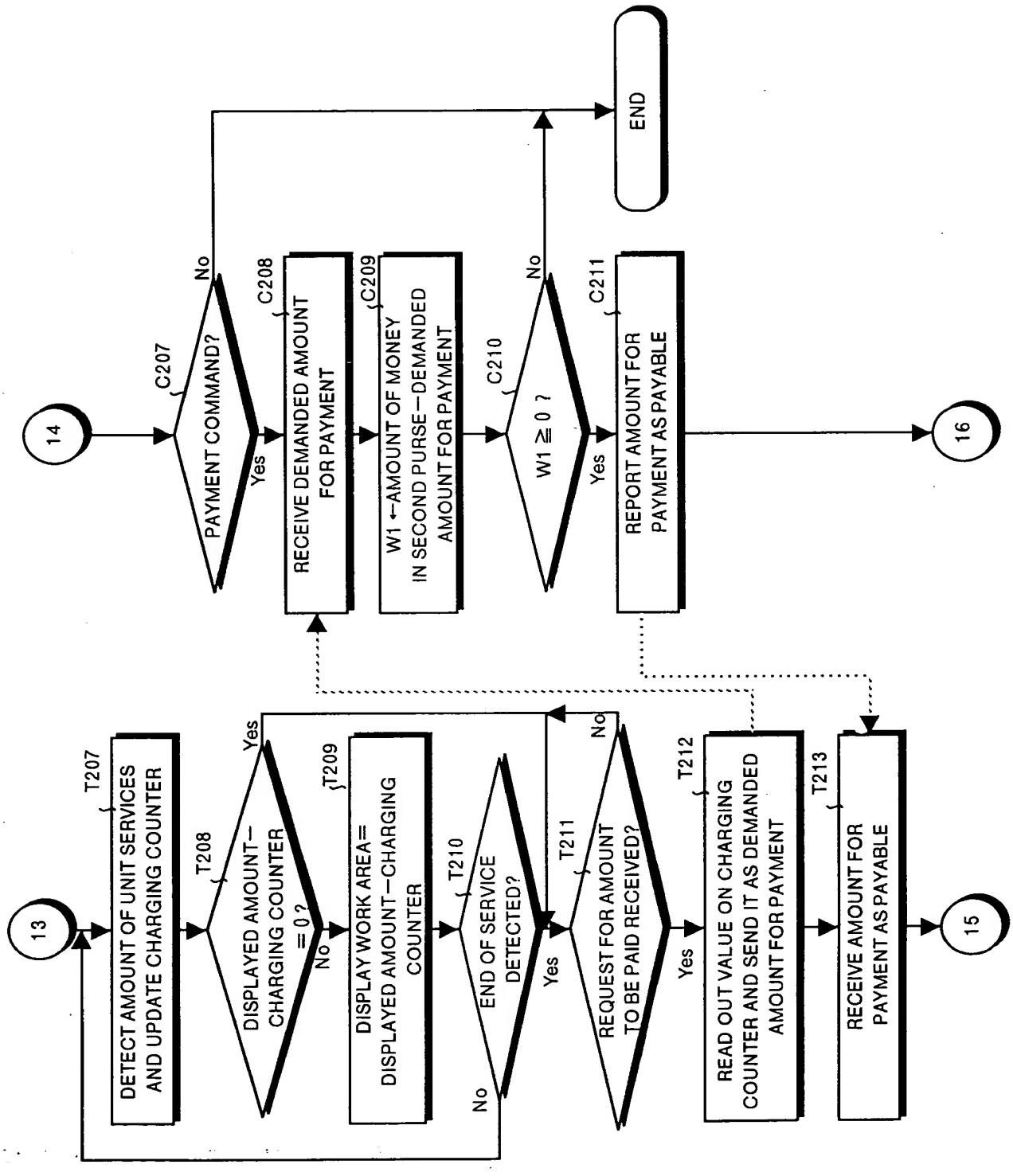

13
T207
DETECT AMOUNT OF UNIT SERVICES AND UPDATE CHARGING COUNTER
T208
DISPLAYED AMOUNT−CHARGING COUNTER = 0 ?
Yes
No
T209
DISPLAY WORK AREA= DISPLAYED AMOUNT−CHARGING COUNTER
T210
END OF SERVICE DETECTED?
No
Yes
T211
REQUEST FOR AMOUNT TO BE PAID RECEIVED?
No
Yes
T212
READ OUT VALUE ON CHARGING COUNTER AND SEND IT AS DEMANDED AMOUNT FOR PAYMENT
T213
RECEIVE AMOUNT FOR PAYMENT AS PAYABLE
15
14
C207
PAYMENT COMMAND?
No
Yes
C208
RECEIVE DEMANDED AMOUNT FOR PAYMENT
C209
W1 ←AMOUNT OF MONEY IN SECOND PURSE−DEMANDED AMOUNT FOR PAYMENT
C210
W1 ≧ 0 ?
No
Yes
C211
REPORT AMOUNT FOR PAYMENT AS PAYABLE
END
16

FIG.28

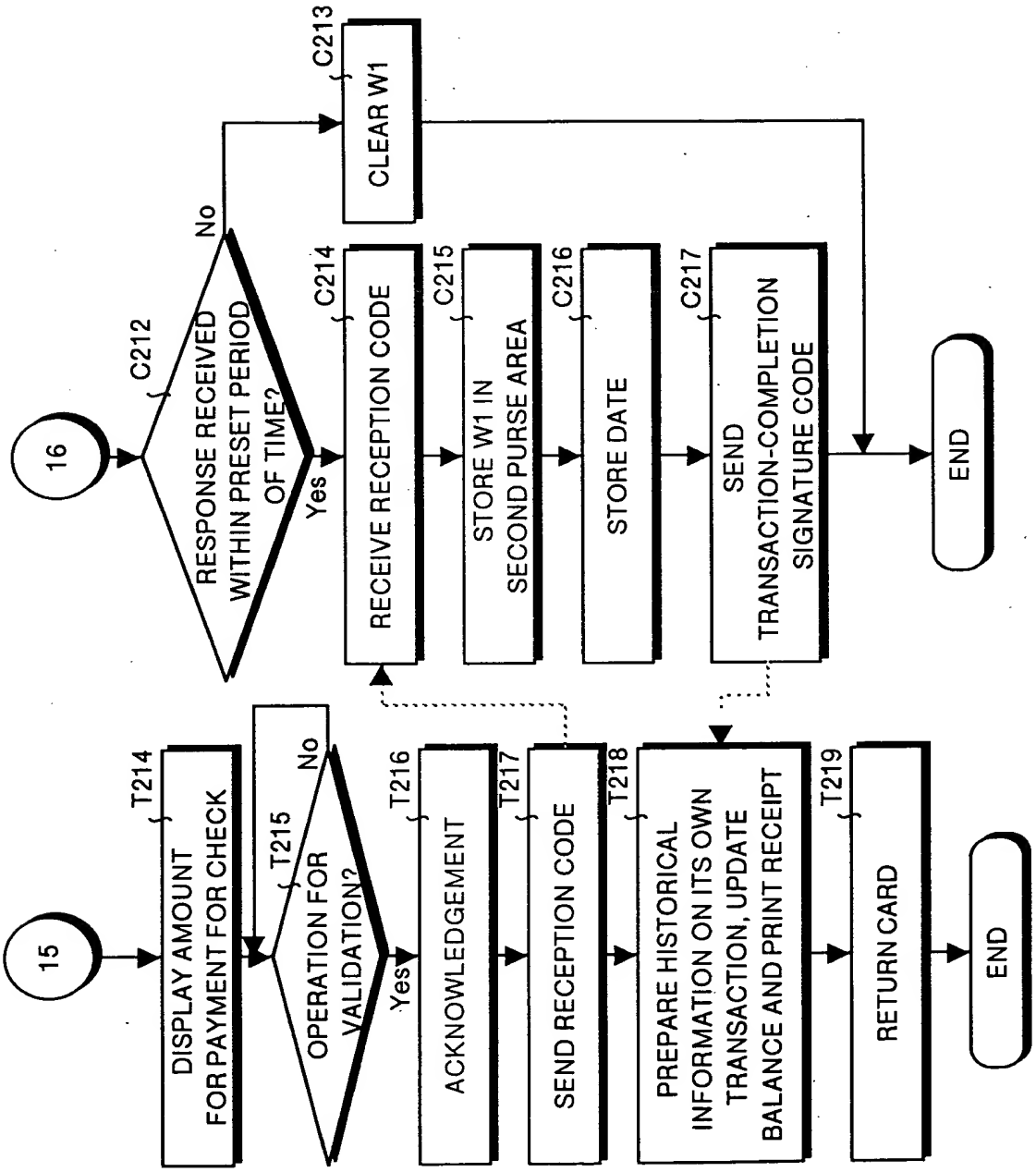

15
T214
DISPLAY AMOUNT FOR PAYMENT FOR CHECK
T215
OPERATION FOR VALIDATION?
No
Yes
T216
ACKNOWLEDGEMENT
T217
SEND RECEPTION CODE
T218
PREPARE HISTORICAL INFORMATION ON ITS OWN TRANSACTION, UPDATE BALANCE AND PRINT RECEIPT
T219
RETURN CARD
END
16
C212
RESPONSE RECEIVED WITHIN PRESET PERIOD OF TIME?
No
Yes
C213
CLEAR W1
C214
RECEIVE RECEPTION CODE
C215
STORE W1 IN SECOND PURSE AREA
C216
STORE DATE
C217
SEND TRANSACTION-COMPLETION SIGNATURE CODE
END

FIG.29

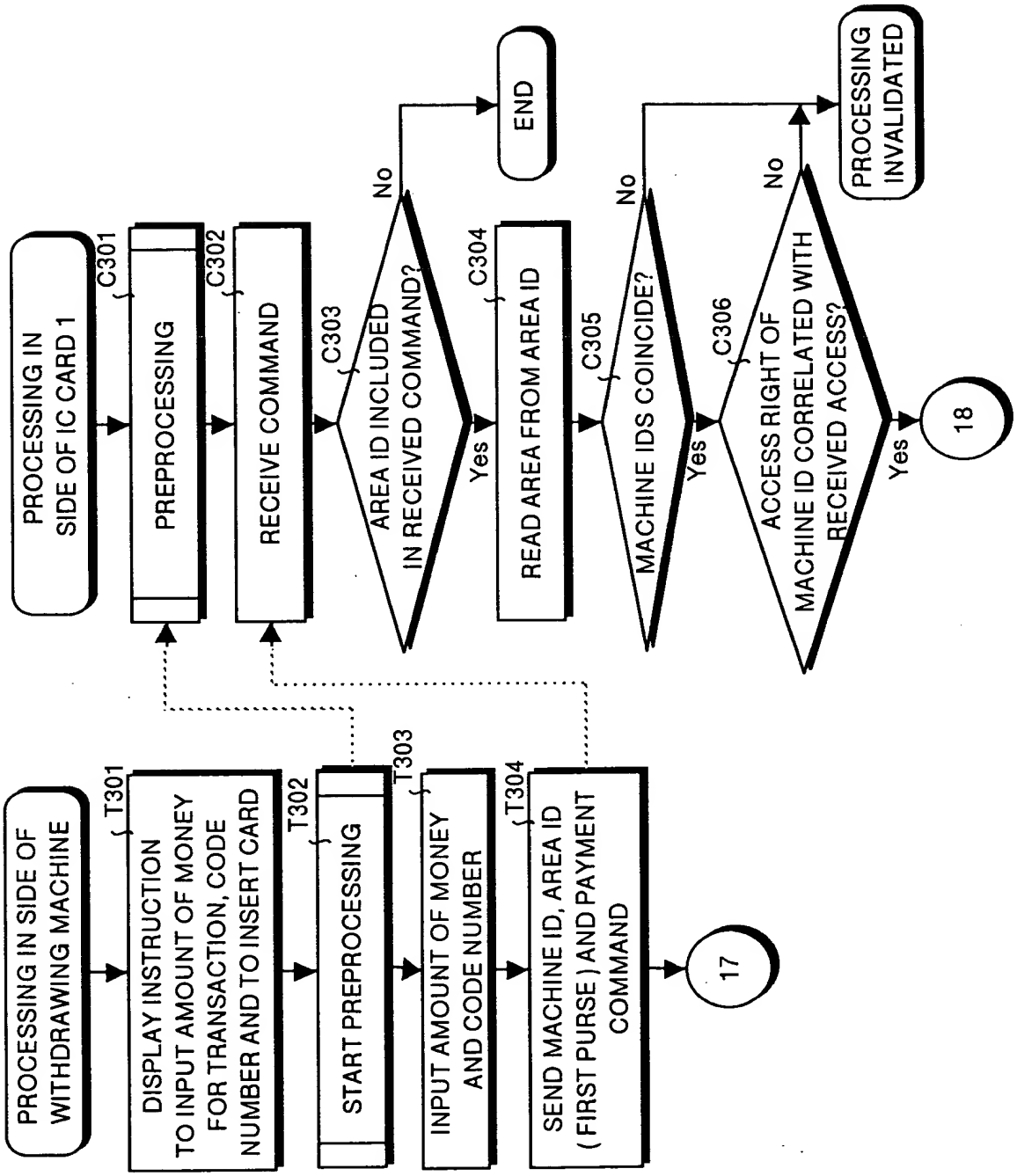

PROCESSING IN SIDE OF WITHDRAWING MACHINE
T301
DISPLAY INSTRUCTION TO INPUT AMOUNT OF MONEY FOR TRANSACTION, CODE NUMBER AND TO INSERT CARD
T302
START PREPROCESSING
T303
INPUT AMOUNT OF MONEY AND CODE NUMBER
T304
SEND MACHINE ID, AREA ID (FIRST PURSE) AND PAYMENT COMMAND
17
PROCESSING IN SIDE OF IC CARD 1
C301
PREPROCESSING
C302
RECEIVE COMMAND
C303
AREA ID INCLUDED IN RECEIVED COMMAND?
No
END
Yes
C304
READ AREA FROM AREA ID
C305
MACHINE IDS COINCIDE?
No
PROCESSING INVALIDATED
Yes
C306
ACCESS RIGHT OF MACHINE ID CORRELATED WITH RECEIVED ACCESS?
No
Yes
18

FIG.30

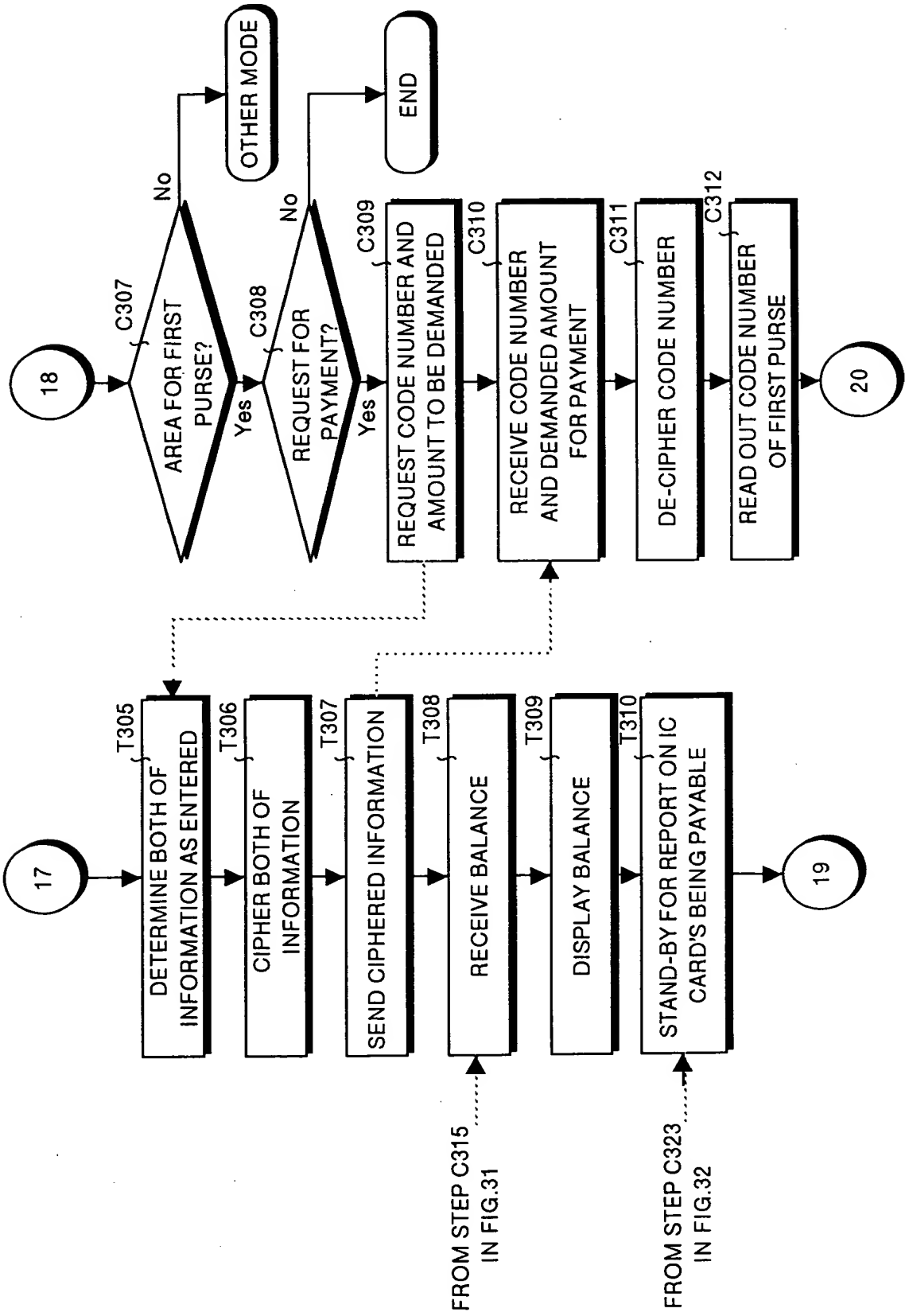

17
T305
DETERMINE BOTH OF INFORMATION AS ENTERED
T306
CIPHER BOTH OF INFORMATION
T307
SEND CIPHERED INFORMATION
T308
RECEIVE BALANCE
T309
DISPLAY BALANCE
T310
STAND-BY FOR REPORT ON IC CARD'S BEING PAYABLE
19
FROM STEP C315 IN FIG.31
FROM STEP C323 IN FIG.32
18
C307
AREA FOR FIRST PURSE?
No
Yes
OTHER MODE
C308
REQUEST FOR PAYMENT?
No
Yes
END
C309
REQUEST CODE NUMBER AND AMOUNT TO BE DEMANDED
C310
RECEIVE CODE NUMBER AND DEMANDED AMOUNT FOR PAYMENT
C311
DE-CIPHER CODE NUMBER
C312
READ OUT CODE NUMBER OF FIRST PURSE
20

FIG.31

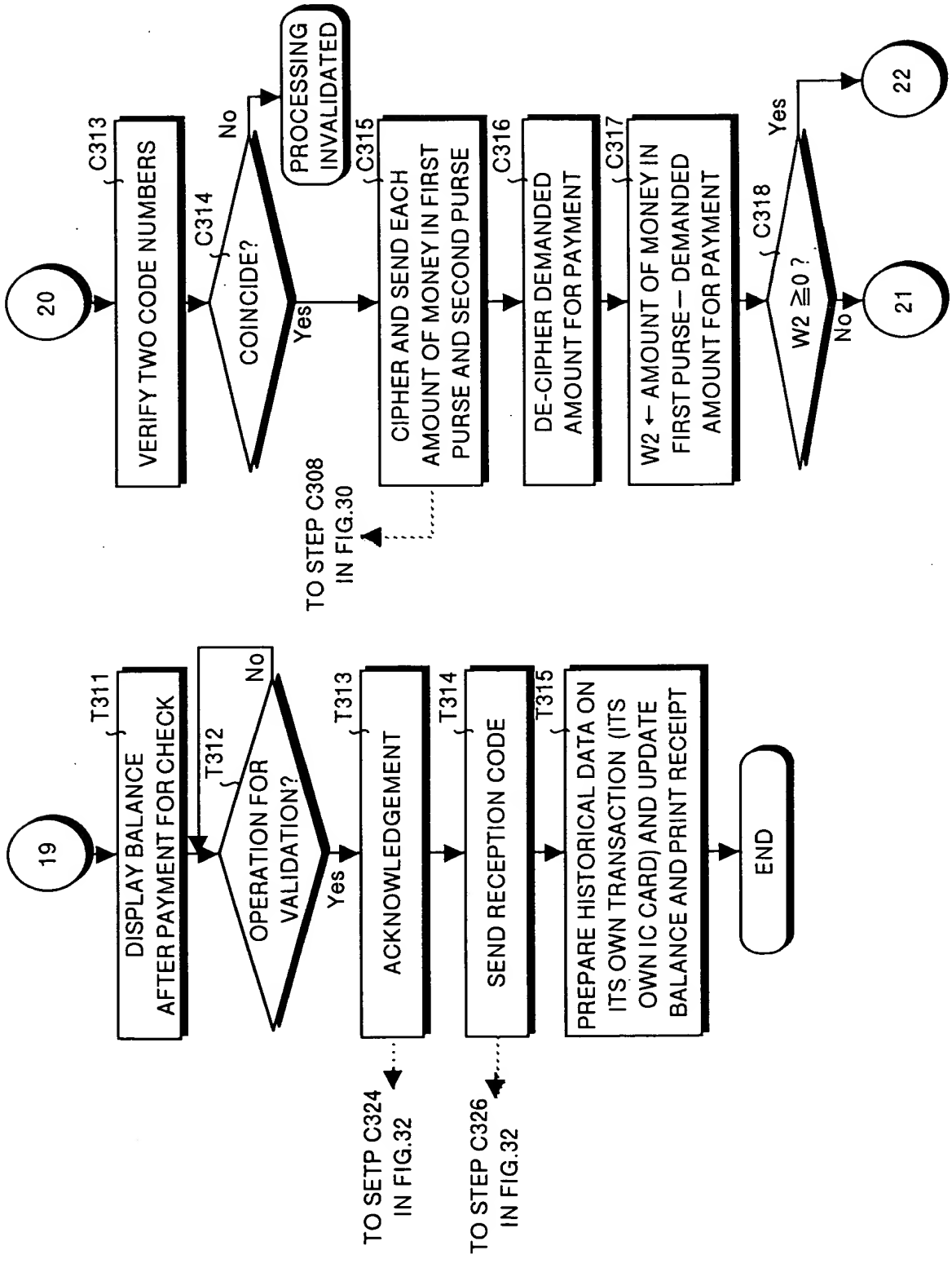

19
T311
DISPLAY BALANCE AFTER PAYMENT FOR CHECK
T312
OPERATION FOR VALIDATION?
No
Yes
T313
ACKNOWLEDGEMENT
T314
SEND RECEPTION CODE
T315
PREPARE HISTORICAL DATA ON ITS OWN TRANSACTION (ITS OWN IC CARD) AND UPDATE BALANCE AND PRINT RECEIPT
END
TO SETP C324 IN FIG.32
TO STEP C326 IN FIG.32
20
C313
VERIFY TWO CODE NUMBERS
C314
COINCIDE?
No
Yes
PROCESSING INVALIDATED
C315
CIPHER AND SEND EACH AMOUNT OF MONEY IN FIRST PURSE AND SECOND PURSE
TO STEP C308 IN FIG.30
C316
DE-CIPHER DEMANDED AMOUNT FOR PAYMENT
C317
W2 ← AMOUNT OF MONEY IN FIRST PURSE− DEMANDED AMOUNT FOR PAYMENT
C318
W2 ≧0 ?
Yes
No
21
22

FIG.32

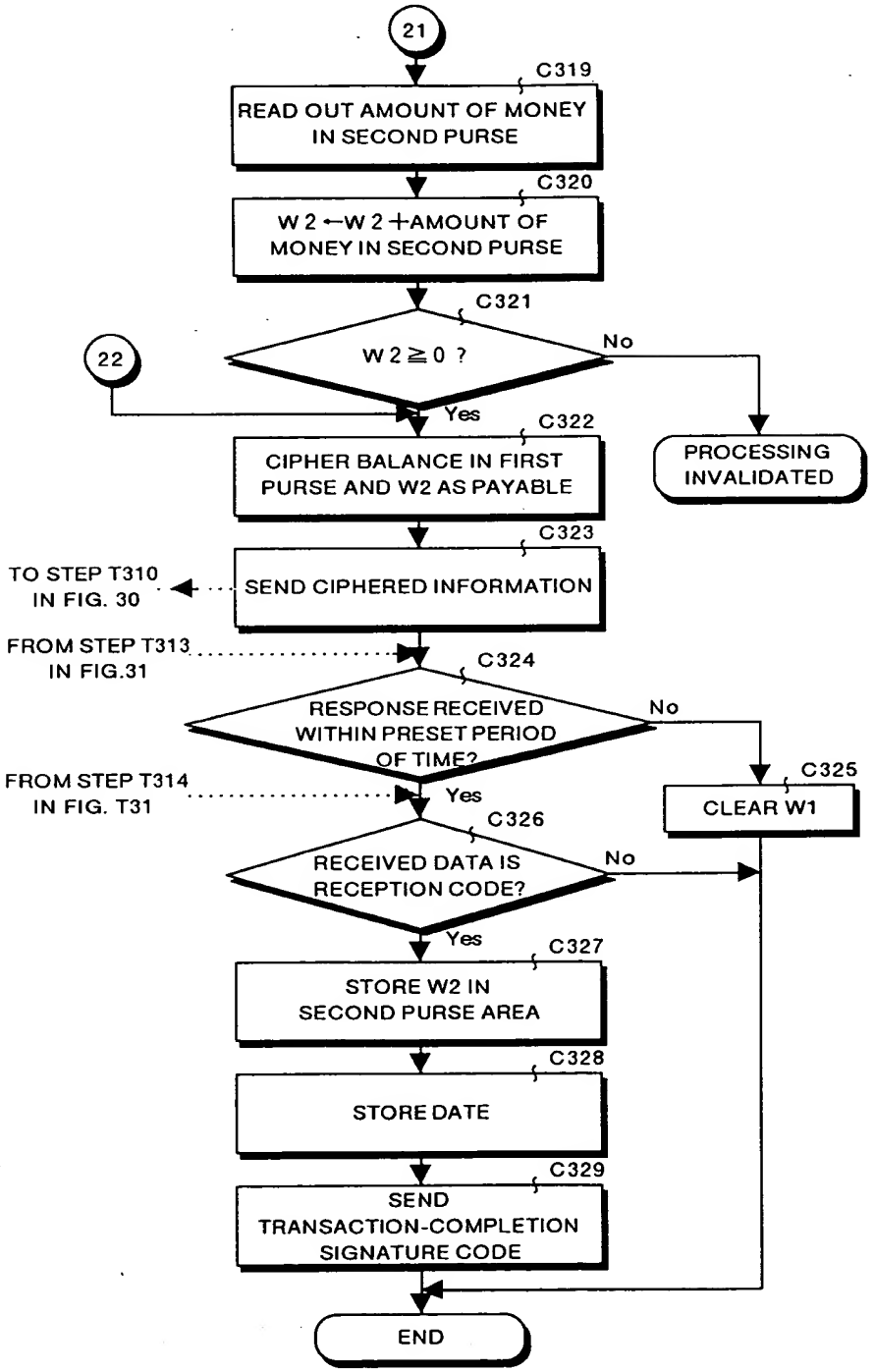

21
C319
READ OUT AMOUNT OF MONEY IN SECOND PURSE
C320
W 2 ←W 2 +AMOUNT OF MONEY IN SECOND PURSE
C321
W 2 ≧ 0 ?
No
22
Yes
C322
CIPHER BALANCE IN FIRST PURSE AND W2 AS PAYABLE
PROCESSING INVALIDATED
C323
TO STEP T310 IN FIG. 30
SEND CIPHERED INFORMATION
FROM STEP T313 IN FIG.31
C324
RESPONSE RECEIVED WITHIN PRESET PERIOD OF TIME?
No
C325
CLEAR W1
FROM STEP T314 IN FIG. T31
Yes
C326
RECEIVED DATA IS RECEPTION CODE?
No
Yes
C327
STORE W2 IN SECOND PURSE AREA
C328
STORE DATE
C329
SEND TRANSACTION-COMPLETION SIGNATURE CODE
END

FIG.33

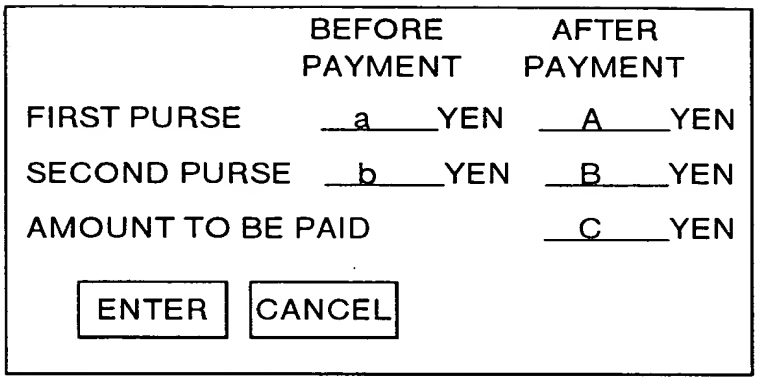

BEFORE PAYMENT
AFTER PAYMENT
FIRST PURSE
a YEN
A YEN
SECOND PURSE
b YEN
B YEN
AMOUNT TO BE PAID
C YEN
ENTER
CANCEL

FIG.34

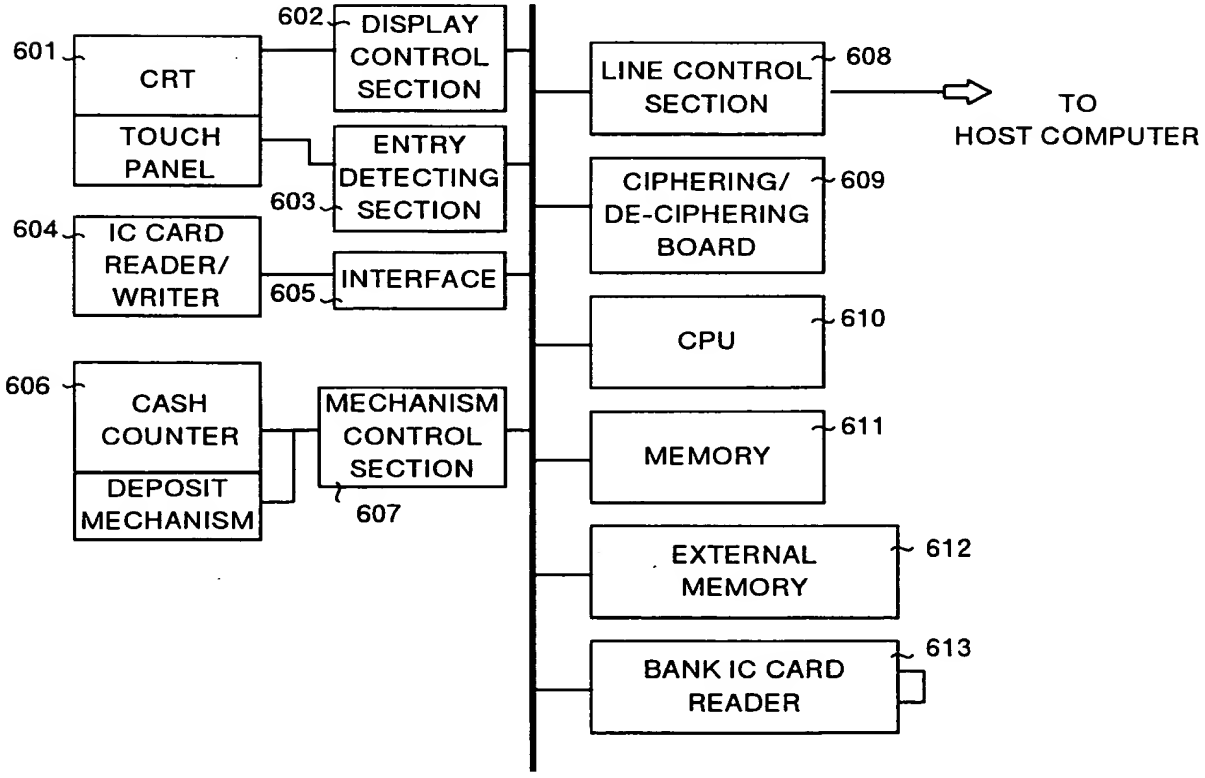

601
CRT
TOUCH PANEL
602
DISPLAY CONTROL SECTION
603
ENTRY DETECTING SECTION
604
IC CARD READER/ WRITER
605
INTERFACE
606
CASH COUNTER
DEPOSIT MECHANISM
MECHANISM CONTROL SECTION
607
LINE CONTROL SECTION
608
TO HOST COMPUTER
CIPHERING/ DE-CIPHERING BOARD
609
CPU
610
MEMORY
611
EXTERNAL MEMORY
612
BANK IC CARD READER
613

FIG.35

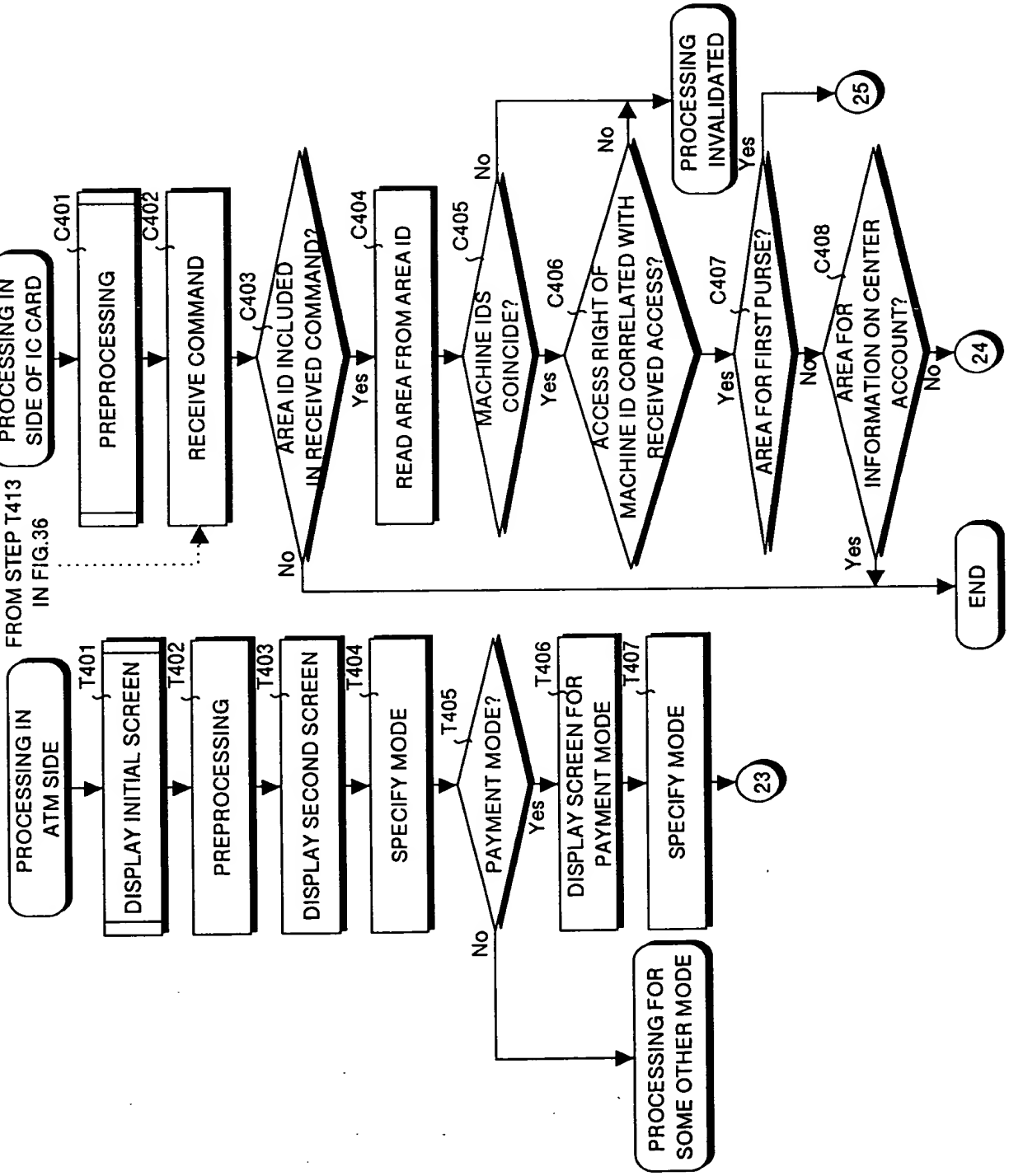

PROCESSING IN ATM SIDE
T401
DISPLAY INITIAL SCREEN
T402
PREPROCESSING
T403
DISPLAY SECOND SCREEN
T404
SPECIFY MODE
T405
PAYMENT MODE?
Yes
No
T406
DISPLAY SCREEN FOR PAYMENT MODE
T407
SPECIFY MODE
PROCESSING FOR SOME OTHER MODE
23
FROM STEP T413 IN FIG.36
PROCESSING IN SIDE OF IC CARD
C401
PREPROCESSING
C402
RECEIVE COMMAND
C403
AREA ID INCLUDED IN RECEIVED COMMAND?
No
Yes
C404
READ AREA FROM AREA ID
C405
MACHINE IDS COINCIDE?
No
Yes
C406
ACCESS RIGHT OF MACHINE ID CORRELATED WITH RECEIVED ACCESS?
No
Yes
PROCESSING INVALIDATED
C407
AREA FOR FIRST PURSE?
Yes
No
25
C408
AREA FOR INFORMATION ON CENTER ACCOUNT?
No
Yes
24
END

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FIG.36

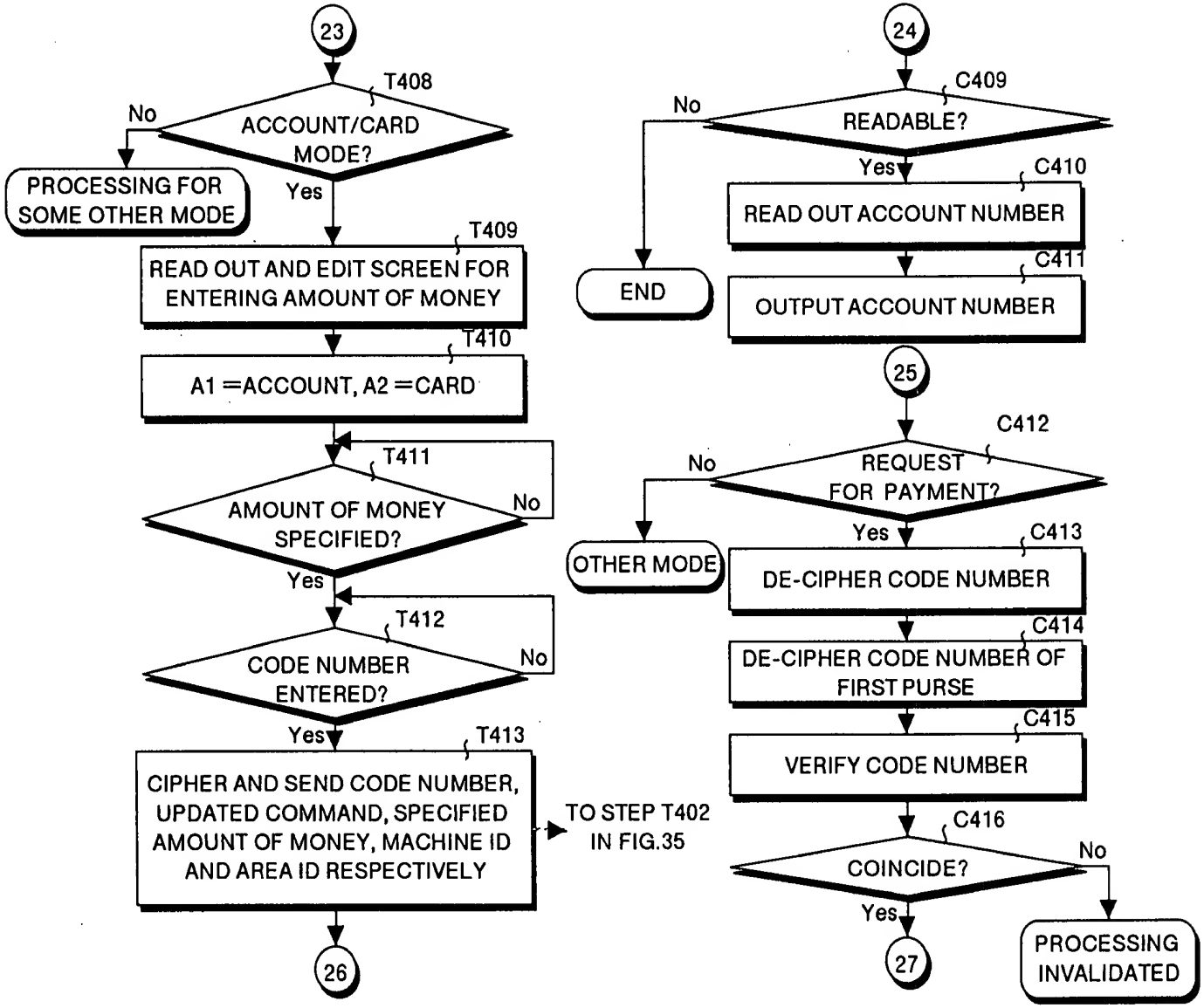

FIG.37

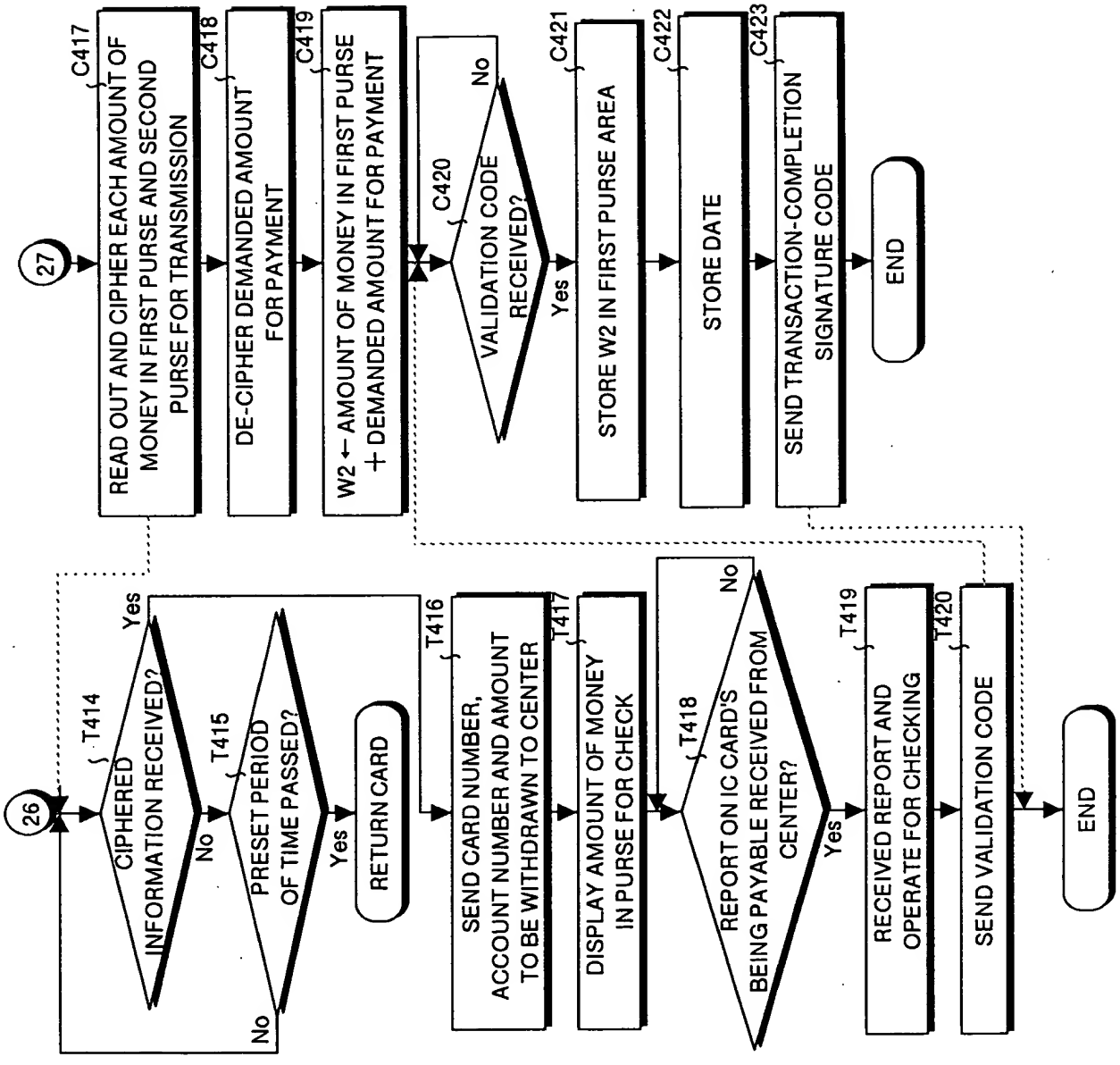
26
T414
CIPHERED INFORMATION RECEIVED?
Yes
No
T415
PRESET PERIOD OF TIME PASSED?
Yes
No
RETURN CARD
T416
SEND CARD NUMBER, ACCOUNT NUMBER AND AMOUNT TO BE WITHDRAWN TO CENTER
T417
DISPLAY AMOUNT OF MONEY IN PURSE FOR CHECK
T418
REPORT ON IC CARD'S BEING PAYABLE RECEIVED FROM CENTER?
No
Yes
T419
RECEIVED REPORT AND OPERATE FOR CHECKING
T420
SEND VALIDATION CODE
END
27
C417
READ OUT AND CIPHER EACH AMOUNT OF MONEY IN FIRST PURSE AND SECOND PURSE FOR TRANSMISSION
C418
DE-CIPHER DEMANDED AMOUNT FOR PAYMENT
C419
W2 ← AMOUNT OF MONEY IN FIRST PURSE + DEMANDED AMOUNT FOR PAYMENT
C420
VALIDATION CODE RECEIVED?
No
Yes
C421
STORE W2 IN FIRST PURSE AREA
C422
STORE DATE
C423
SEND TRANSACTION-COMPLETION SIGNATURE CODE
END

FIG.38A

INITIAL SCREEN

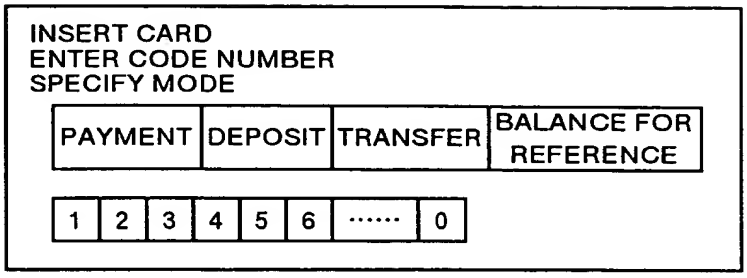

FIG.38B

SCREEN FOR PAYMENT MODE

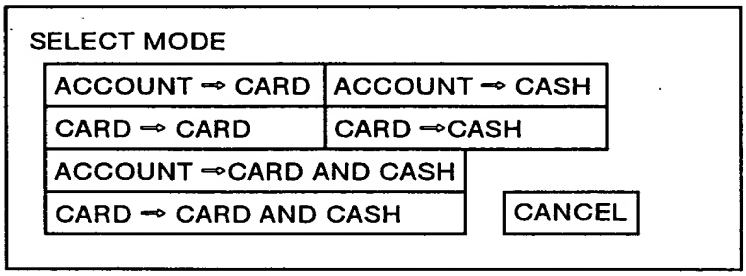

FIG.38C

SCREEN FOR DEPOSIT

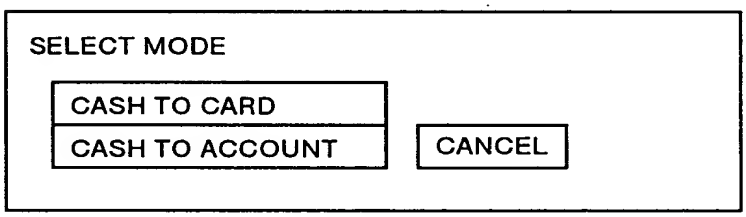

FIG.38D

SCREEN FOR TRANSFER MODE

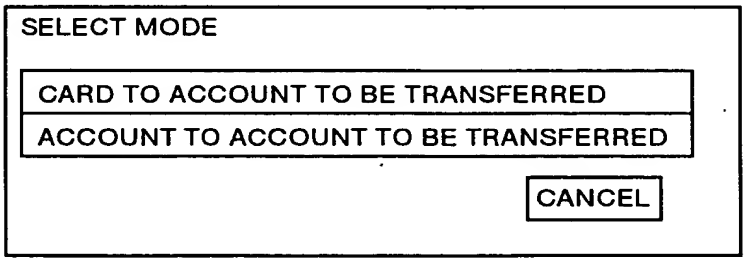

FIG.38E

SCREEN FOR BALANCE FOR REFERENCE MODE

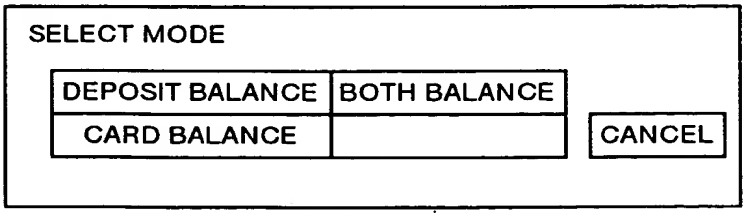

FIG.39A

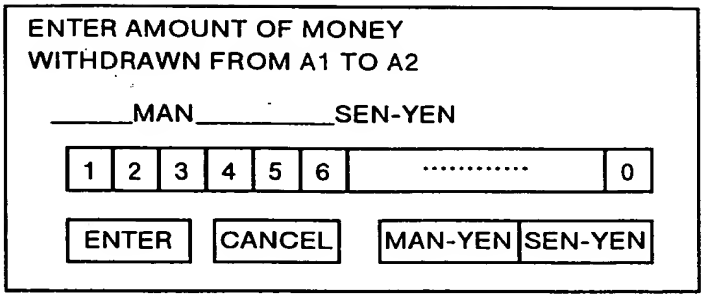

FIG.39B

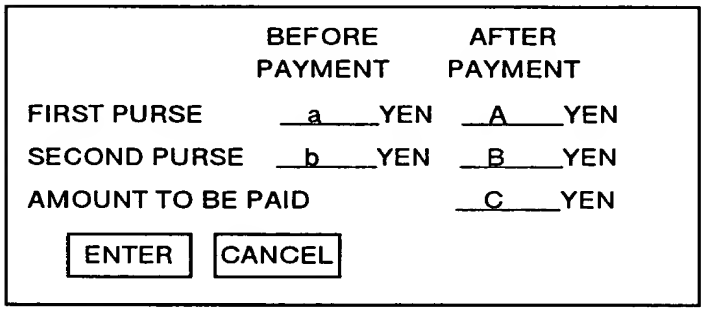

FIG.39C

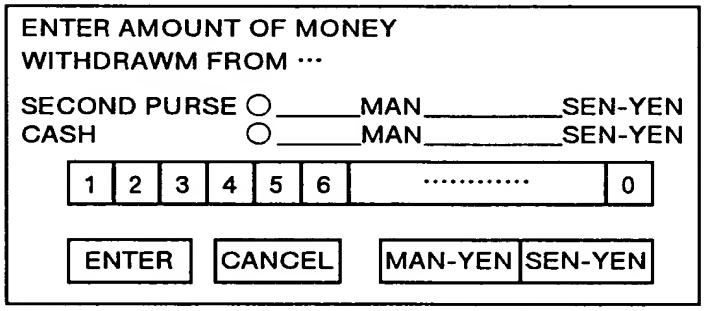
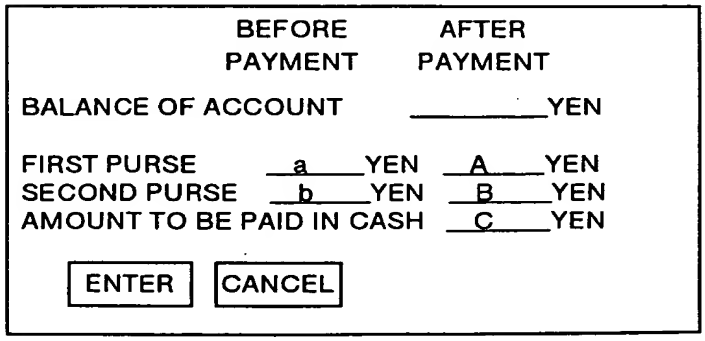
FIG.39D